FOREST SERVICE
BRITISH COLUMBIA

BCTS
Babine Business Area
EMS

Field Manual

106-01644/

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Updated on October 14/05

BCTS
BC Timber Sales

B C Timber Sales, Babine Business Area

SUSTAINABLE FOREST MANAGEMENT (SFM) POLICY

The British Columbia Ministry of Forests B C Timber Sales Program (BCTS) manages and administers timber harvesting and related forest management activities on BCTS timber sale licences and related tenures sold on Crown forestland throughout British Columbia.

It is the policy of the BCTS, Babine Business Area to:

- Comply with all relevant environmental legislation and regulations.
- Achieve and maintain SFM.
- Respect Aboriginal and treaty rights.
- Provide participation opportunities for Aboriginal peoples with respect to their rights and interests in SFM.
- Provide for public participation.
- Provide conditions and safeguards for the health and safety of workers and the public on lands we manage.
- Improve knowledge about the forest and SFM, and to monitor advances in SFM science and technology and incorporate them where applicable.
- Strive for excellence in forest management by continually improving the performance of resource management activities and practices. Maintain a framework for setting and reviewing environmental objectives and targets. Monitor and evaluate key BCTS forestry operations.
- Endeavour to prevent or mitigate undesired environmental impacts and pollution associated with BCTS forestry operations.
- Communicate BCTS business activities and policies to all staff and make them available to the public.

June 8, 2005

Timber Sales Manager

Updated: June 8, 2005

_Babine Business Area

BCTS
BC Timber Sales

B C Timber Sales, Babine Business Area
ENVIRONMENTAL MANAGEMENT SYSTEM

Significant Environmental Aspects

The International Standard specifies requirements for an environmental management system to contain significant environmental aspects. These significant environmental aspects identify the environmental aspects of its activities, products and services within the defined scope of the environmental management system that it can control and those that it can influence taking into account planned or new developments, or new or modified activities, products and services. These aspects will be used by staff to identify areas where BCTS has or may have an impact on the environment and will take these environmental aspects into account.

1) Alter or influence riparian areas / water quality
2) Alter or influence natural drainage patterns
3) Alter or influence fish habitat
4) Fire prevention / fire control
5) Fuel / oil / chemical / or waste handling
6) Alter or influence wildlife or species at risk habitat
7) Alter or influence soil / terrain stability

June 9, *2005*

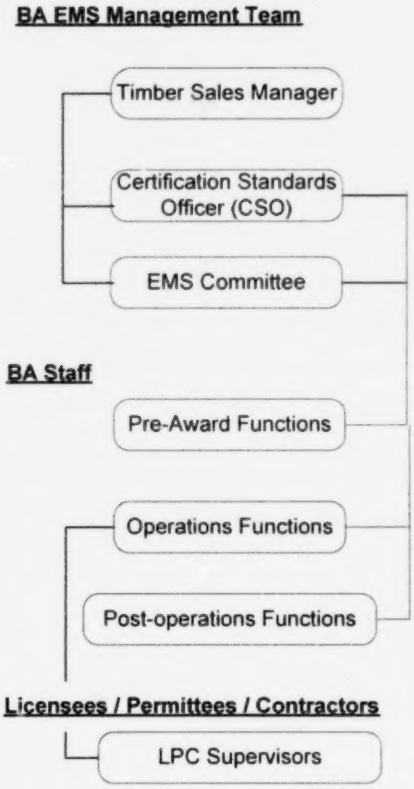
Timber Sales Manager

Updated: June 8, 2005

_Babine Business Area

BC Timber Sales
Environmental Management System

Table 008-1
Timber Sales Office EMS Organization Chart


BA EMS Management Team
Timber Sales Manager
Certification Standards Officer (CSO)
EMS Committee
BA Staff
Pre-Award Functions
Operations Functions
Post-operations Functions
Licensees / Permittees / Contractors
LPC Supervisors

Role and Function:

- supports environmental policy and identifies and provides resources to run EMS
- resolves issues identified by BA staff and CSO
- ensures that EMS is implemented
- provides authority and resources for effective management
- assigns specific EMS roles

- reports on performance to management
- chairs the EMS Committee and reports to TSM
- maintains the Sustainable Forest Management Plan
- participates in the PAG
- consolidates data for annual reports

- reviews EMS progress and goals
- reviews issues and concerns identified by BA staff

- implements and maintains pre-award EMS activities
- reviews pre-award EMS progress and goals
- identifies issues and concerns to CSO and/or EMS Committee
- planning staff preparing plans in accordance with SFMP

- implements and maintains operations related EMS activities
- reviews EMS progress & goals
- identifies issues and concerns to CSO

- implements and maintains post-operations EMS activities
- reviews post-operations EMS progress and goals and reports to CSO
- identifies issues and concerns to CSO
- Prepare reports / data for input to annual report

- conformance to environmental field procedures
- maintain emergency response readiness
- ensure all workers and sub-contractors receive EMS and related skills training

BC Timber Sales
Environmental Management System

TABLE 009-1

Training Needs Matrix

1. BA Staff

Training Package	Content	TSM	Operations Managers	Planning Officer	Engineering Officer	Engineering Technician	Forest Technicians	Operations Technician	Area Foresters	Practices Forester	Field Operations Supervisor	Resource Clerks	Other field staff	Other Office Staff
Level 1	EMS / SFM Awareness	x	x	x	x	x	x	x	x	x	x	x	x	x
Level 2	EMS Procedures	x	x	x	x	x	x	x	x	x	x		x	
Legal Reqts	Fire S100				x	x	x	x	x	x	x		x	
	WHMIS	x	x	x	x	x	x	x	x	x	x	x	x	x
Emergency	ERM					x	x	x	x	x	x		x	

2. Licencees / Permitees / Contractors

Training Package	Content	Principal	Supervisor	Worker	Truck Driver
Level 3	EMS/SFM Awareness / Procedures	5	5	5	4
Legal Reqts	Fire S100		1	1	
	TDG Certification		2	2	2
	WHMIS	3	3	3	3
Emergency	ERM	x	x		
	ERP	x	x	x	4

1 - All workers required to conduct Fire control must have certification to the S-100 training standard and S-10A annual refreshers

2 - Anyone handling or transporting Class 3 dangerous goods in quantities greater than 2000 liters (i.e. single or aggregate quantities) must be trained by their employer as per TDG requirements and be issued a certificate

3 - As required by WHMIS when handling or exposed to hazardous substances (eg: fuel, chemicals)

4 - Truck drivers and trucking contractors require Level 3 and ERP training where they have the potential to cause a significant environmental impact
eg: hauling quantities of fuel greater than 2000 litres, self-loading of logs, off-highway, etc.

5- Level 3 training is required for activities that have the potential to cause a significant environmental impact.
If activities have a low risk of causing a significant environmental impact a extended pre-work must be done. Training in EMS, SFM, awareness and procedures.
A tailgate training session

Training Content Guide

	TRAINER	EMS CARD ISSUED?	TRAINERS CARD ISSUED?	EMS Awareness	SFM Awareness	EFPs	EPRM	EOPs	Checklists	Manual	Training Methods	Supplementary (TDG, WHMIS, etc.)
BA EMS Committee / TSM	CSO			All	Relevant	All	All	All	All	All	-	Relevant
BCTS Field Staff	CSO			All	Relevant	All	All	All	All	Relevant	-	Relevant
BCTS Admin. Staff	CSO			All	Relevant	-	-	-	-	Relevant	-	Relevant
LPC Principal / Supervisor	Approved **	Y		All	Relevant	All	All	Relevant	Relevant		-	Relevant
Worker *	LPC or Approved **			Relevant	Relevant	All	All	-	-	-	-	-
Train-the-Trainer	CSO		Y	All		All	All	All	Relevant	-	All	All

* *Valid only during employment for the LPC who provided the training*

** *Approved = Holder of a Trainers Card or a BCTS staff member approved by the CSO*

Level 1
Level 2
Level 3

Refresher intervals are not defined. It is the responsibility of the LPC and the Workers to maintain the level of training. BCTS will identify LPCs and Workers who have not maintained adequate levels of training in preworks and inspections, and require the LPC or Worker to update their

B.C. Timber Sales
ENVIRONMENTAL MANAGEMENT SYSTEM
Babine Business Area

Positions and committees responsible for maintenance, implementation and performance of the EMS.

Accountable (A) – individual or group who delegates authority for a task and ensures that it is accomplished.

Responsible (R) – individual or group with a direct role for completing a task.

Involvement (X) – individual or group with minor or supporting role for ensuring a task is accomplished.

Element	**Timber Sales Manager**	**CSO**	**EMS Committee**	**BA Staff**	**LPC Supervisors**
Environmental Policy	R				
Environmental Aspects	A	X	R	X	
Legal and other requirements	A	X	R		
Objectives and Targets	A	X	R		
Environmental Management Program	A	X	R	X	
Structure and Responsibility	R	X	X	X	X
Training, Awareness, and Competence	A	X	R	R	R
Communication	A	X	X	X	X
EMS document control	A	R	X		
Operational Control	A	X	R	R	R
Emergency Preparedness and Response	X	R	X		R
Monitoring and Measurement	A	X	R	R	R
Non-conformance / Corrective / Preventive Action	X	X	A	R	R
Records	A	X	R	X	X
EMS Audit	A	R	X	X	
Management Review	A	R	X		

LP Supervisor(s) responsibility column for Monitoring & Measurement and Non-conformance / Corrective / Preventive Action is only applicable for those licenses & permits which contain mandatory requirements.

BCTS
BC Timber Sales

EMERGENCY RESPONSE MANUAL

Updated: October 14, 2005

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Introduction

BCTS Environmental Management System

An Environmental Management System (EMS) has been developed for BC Timber Sales (BCTS) that is compliant with the ISO 14001 international standard. The intention of the EMS is to enable consistent implementation of environmental protection measures and to achieve objectives for environmental performance by the BCTS Business Areas.

The BCTS Babine Business Area Sustainable Forest Management Policy states that it is the policy of BCTS to:

- *Comply with all relevant environmental legislation and regulations,*
- *Achieve and maintain SFM*
- *Respect Aboriginal and treaty rights*
- *Provide participation opportunities for Aboriginal peoples with respect to their rights and interests in SFM.*
- *Provide for public participation.*
- *Provide conditions and safeguards for the health and safety of workers and the public on lands we manage.*
- *Improve knowledge about the forest and SFM, and to monitor advances in SFM science and technologyand incorporate them where applicable.*
- *Strive for excellence in forest management by continually improving the performance of resource management activities and practices,*
- *Maintain a framework for setting and reviewing environmental objectives and targets,*
- *Monitor and evaluate key BCTS forestry operations,*
- *Endeavor to prevent or to mitigate undesired environmental impacts associated with BCTS operations,*
- *Communicate BCTS business activities and policies to all staff and make them available to the public.*

Emergency preparedness and response is a component of the BCTS EMS. Chapter 13 of the BCTS EMS Manual outlines the requirement for this Emergency Response Manual (ERM), as well as Emergency Response Plans (ERP).

Purpose

This ERM outlines procedures for emergency awareness, preparation and response with the purpose of preventing, minimizing and/or mitigating environmental impacts. Following these procedures will reduce the potential for emergencies, as well as provide a framework for proper response to emergency situations that do occur.

Scope

This manual applies to the following types of emergency situations:

- **Forest fires**, both industrial and natural; and
- **Hazardous material spills**, including fuel, oil and pesticides;
- **Landslides** and other major erosion events.

The manual applies to all activities conducted by BCTS, and by licencees, permitees and contractors working under BCTS. This manual does NOT replace the requirement to understand and comply with legislation, licenses, permits and contract specifications.

Emergency Preparedness and Response Concepts

There are several general concepts involved in being prepared for emergency situations, regardless of whether the emergency is a forest fire, a hazardous materials spill, or an erosion event. These general concepts include:

Worker Safety

In the event of an incident, the main priority of all workers is to ensure their own personal safety and the safety of their co-workers. The second priority is to limit damage to the environment and equipment.

Awareness

Awareness must be part of the culture of the BCTS. The first step in avoiding an emergency incident is recognizing potential hazards and taking steps to minimize the risk of an emergency occurring. The EMS outlines the significant environmental aspects. An awareness of these significant aspects, and adhering to the EFP's, will help to ensure that risks of environmental incidents are minimized.

Tools

All persons must ensure they have the required tools (spill kit, fire tools, etc.) available at all times, and located in a fashion that allows easy access to the tools when required.

Training

Training for persons working in the field is essential to the successful implementation of an emergency preparedness and response program. All persons involved in operations must be trained in the procedures to follow in the event of an emergency. Persons working in the field should not have to refer to the emergency response plan prior to taking action in an emergency.

Testing

Generally, response readiness tests verify that equipment is operational and licensees/permittees/contractors and their employees are familiar with response requirements and plans. Tests can be completed in various forms, including:

- Full mock exercises (drills),
- Review of procedures,
- Employee interviews,
- Equipment testing.

Reporting

In the case of an emergency, it is important that field personnel know who to contact, and what information will need to be relayed.

Follow-up Investigation

Through the BCTS EMS, all incidents will be investigated to determine root causes and to identify and implement operational changes that reduce the possibility of a reoccurrence (EMS Manual, Chapter 15).

Forest Fires

All forest fires must be reported immediately to:

- **1-800-663-5555, or**
- ***5555 on the Cantel or Telus cellular networks, or**
- **A regional manager, district manager, designated forest official, or peace officer.**

The BCTS contact must also be notified as soon as possible.

Fire Preparedness Responsibilities

BCTS

- Determine, by BA, the sufficient fire tool requirements for BCTS vehicles.
- Assist licensees / permittees / contractors in completing an emergency response plan (ERP).
- Verify that licensees / permittees / contractors have provided the 24 hour contact number from the ERP to Ministry of Forests Protection Branch.
- Verify that licensees / permittees / contractors have the minimum fire response equipment on-site as per the ERP.
- Verify 'trained personnel' requirements are met by licensees / permittees / contractors.
- Verify that licensees / permittees / contractors are conducting periodic tests of fire preparedness and response to an adequate level.

Licensees/Permittees/Contractors

- Determine fire response equipment sufficient for the type of operation and the associated fire risk to comply with the Wildfire Regulations.
- Complete an emergency response plan (ERP) including identifying the on-site fire response equipment and personnel.
- Provide a copy of the completed ERP to BCTS upon request.
- Forward the 24 hour contact number from the ERP to Ministry of Forests Protection Branch in accordance with the Wildfire Act requirements.
- Complete Hazard Assessments at prescribed intervals in accordance with the Wildfire Regulation.
- Complete fire tool inspections.
- Obtain the appropriate fire weather index information using a representative weather station and determine the appropriate Fire Danger Class for the area (see http://www.for.gov.bc.ca/pscripts/protect/dgrcls/dgrcls.asp for Danger Class Reports).

- Restrict activities during Fire Danger Class III, IV, or V situations, including implementing fire watch, early shift, and cease activity, as required (see Schedule 3 of the Wildfire Regulation).
- Ensure employees are aware of all fire preparedness and response responsibilities.
- Ensure employees are trained in fire preparedness and response in accordance with WCB requirements.
- Conduct periodic tests of fire preparedness and response to an adequate level, and retain the records for BCTS review.
- Respond to fires in accordance with the fire preparedness plan, the ERP, and this ERM.
- Licencee / Permittee / Contractor has the responsibility to use all resources at hand to action a forest fire that is within 1 km of the site of the industrial activity.

Fire Action Steps

If a Fire Occurs During Operations:

1. **Stop operations** and notify your supervisor and the rest of the crew.
2. **Immediately report the fire**. See highlighted box on previous page for reporting information, and refer to the ERP for additional phone numbers if required. The person reporting the fire shall remain available to communicate details of the fire suppression activity taken, and what further actions may be required.
3. The remaining crew shall begin immediate action on the fire to the level of their training, safety and confidence.
4. The person in charge of the crew during suppression operations will continue to supervise the efforts until relieved by another licensee/permitee/contractor representative or forest service personnel. The situation will be re-assessed on an ongoing basis, and responsibilities re-assigned depending on the tools and personnel required to action the fire,
5. Complete an Incident Report Form (EMS CHK-007) and submit it to the BCTS contact.

If You Observe a Fire When You are Alone:

1. **DO NOT take action on an intense fire yourself**. Notify the forest service immediately and follow their instructions. Then notify the licensee / permitee / contractor representative.
2. **Take immediate action** on the fire if you believe you can control it yourself. Notify the forest service and licensee / permitee / contractor representative as soon as you feel the fire can be left alone without spreading out of control.
3. Complete an Incident Report Form (EMS CHK-007).

Hazardous Materials Spills

All spills that are equal to or greater than the PEP Reportable Level must be reported to the Provincial Emergency Program (PEP, at 1-800-663-3456) as soon as possible, and within 24 hours at a maximum.

All spills that are equal to or greater than the BCTS Reportable Level must be reported to the BCTS contact as soon as possible.

See the Table 1 below for reportable levels of hazardous materials spills.

Table 1: Reportable Levels of Hazardous Materials Spills

Hazardous Material	**PEP Reportable Level (1)**	**BCTS Reportable Level (2)**
Antifreeze	5 kilograms (5 liters)	5 litres
Diesel fuel	100 litres	25 litres
Gasoline (auto & saw)	100 litres	25 litres
Greases	100 litres	25 litres
Hydraulic Oil	100 litres	25 litres
Lubricating Oils	100 litres	25 litres
Methyl Hydrate	5 kilograms	5 litres
Paints & Paint Thinners	100 litres	25 litres
Solvents	100 litres	25 litres
Pesticides	1 kilogram	1 kilogram
Explosives	Any	Any

(1) as required by the BC Spill Reporting Regulation

(2) or a spill of ANY quantity that enters a surface water body (e.g.: running ditch, stream, lake)

Spill Preparedness

Being prepared for spills of hazardous materials basically consists of two steps:

1. recognizing where the potential for a spill is highest (typically handling areas such as refueling sites), and
2. Having the materials on-hand to contain the spilled substance (spill kits).

Any operation that uses fuel, oil, or pesticides has the potential for spills. The licensee/permitee/contractor must assess the potential spill sources for his operation and identify specific spill kit requirements in the ERP.

The spill kits requirements listed in Table 2 following are the minimum expectations of BCTS. and licensee / permitee / contractors Each licensee / permitee / contractor is responsible for determining how many and what types of spill kits are required, and for specifying spill kit locations in the ERP.

Table 2: Minimum Spill Kit Requirements

1. **In LPC&BCTS vehicles/Equipment / Machinery (e.g.: Logging Trucks, Excavators, Skidders)**
    - Spill kits must be present in vehicle equipment as space permits.
    - Spill kits must include:
        - one large heavy duty garbage bag or other suitable container
        - 5 absorbent pads appropriate for the type of hazardous material,
        - protective personal safety gear as required

2. **Vehicles carrying auxiliary fuel (e.g. Truck box tanks, multiple small containers)**
    - Spill kits must be present in vehicles transporting and dispensing fuels
    - Spill kits must include a minimum of:
        - 3 - Heavy duty garbage bags,
        - 8 - absorbent pads appropriate for the type of hazardous material,
        - 2 – 3"x 48"spill booms,
        - absorbent material and/or commercial bioremediation agents,
        - one ABC type fire extinguisher,
        - one shovel
    - A container of Plug-N-Dike is recommended.

3. **Stationary Fuel Storage & dispensing (tanks or multiple-drum caches)**
    - Spill kits must be present at points where fuel is dispensed.
    - Spill kits must include a minimum of:
        - five large heavy duty garbage bags, or one open topped containment drum,
        - 20 absorbent pads appropriate for the type of hazardous material,
        - 4 – 3"x 48"spill booms,
        - 2 - 10ft linkable marine booms (if near marine operations),
        - absorbent material and/or commercial bioremediation agents,
        - 1 – container of Plug-N-Dike,
        - 1 - 20-BC type fire extinguisher,
        - one shovel

Additional information on prevention, preparedness and remediation can be found in the *"BCTS Fuel Management Guide" (June 2005 Edition).*

Spill Preparedness Responsibilities

BCTS

- Ensure that BCTS vehicles carry the required spill kits in accordance with the minimum spill kit content requirements
- BA contact is to be aware of potential spill sources at licensee / permitee / contractor operations.
- Assist licensees / permittees / contractors in completing an emergency response plan (ERP).
- Verify that licensees / permittees / contractors carry spill kits (in the course of EMS inspections).
- Verify the licensee / permitee / contractor is completing spill kit inspections.
- Verify the licensee / permitee / contractor is conducting spill response training to an adequate level.

Licensees/Contractors/Permittees

- Ensure that LPC's vehicles carry the required spill kits in accordance with the minimum spill kit content requirements

- Complete an emergency response plan (ERP) with support from BCTS as required, and provide a copy of the completed ERP to BCTS upon request.
- Ensure all employees are familiar with potential spill sites, spill kit locations and spill procedures.
- Ensure employees are trained in spill response procedures.
- Ensure all employees have access to Material Safety Data Sheets (MSDS) for the hazardous materials that they may be exposed to.
- Ensure appropriate spill kits are available at all potential accidental release sources.
- Complete spill kits inspections and maintain spill kits as necessary.
- Report all reportable spills to the appropriate agencies and to BCTS.
- Conduct periodic spill response tests to an adequate level, and retain the records for BCTS review.
- Respond to all spills in accordance with the emergency response plan and this manual.

Spill Action Steps

1. **Recognize the problem, and evaluate the hazards**. Identify the type of hazardous material spilled and the volume of the spill. Identify and evaluate potential problems that may be encountered during the control, containment and cleanup of spills. Refer to the MSDS for the material spilled. Have fire extinguishers available if there is a risk of fire.
2. **Take control**. Stop operations and shut off equipment, remove any sources of spark or flame. Ensure fellow workers are notified, and stop the source of the spill where possible.
3. **Take action**. Within your ability, use resources at hand to minimize the spread and the impact of the spill until additional resources and expertise arrive. Utilize heavy equipment where suitable. Use your spill response equipment to initiate containment and clean-up. For spills of less than 25 litres:
    - Soak up all free product with absorbent pads, booms, and other materials. Place used absorbent materials in a garbage bag for disposal or recycling.
    - Mix stained soil with loose absorbents or commercial bioremediation agents.

   For spills of 25 litres or more, report the spill to BCTS as required (see the ERP) and follow clean-up directions provided by BCTS or government agencies.
4. **Follow-up**. Report the spill to agencies and/or to BCTS as required (see the ERP). All information and details on reported spills must be documented for follow-up using an Incident Report form (EMS CHK-007). Complete clean-up and required mitigation actions as directed by BCTS or government agencies.

Landslide and Major Erosion Events

Report any Erosion Event that meets the Reporting Criteria to the BCTS Contact as soon as possible.

See Table 3 below for landslide and erosion event reporting criteria.

Table 3: Reporting Criteria for Landslides and Major Erosion Events

Landslides and major erosion events must be reported to BCTS in any of the following circumstances:

- Loss or imminent loss of life or property,
- Significant environmental damage,
- Situations of potential cost of significant government funds or loss of revenue,
- Abnormal movement has occurred or is actively occurring at a site,
- Abnormal sedimentation,
- A volume of material greater than 250 m^3 has moved or is in imminent danger of movement,
- A land area greater than 0.25 hectares is disturbed,
- A road or structure is damaged and requires structural repairs.

Erosion Event Responsibilities

BCTS

- Verify that licensee / permitee / contractor operations are conducted in a manner that minimizes the risk of an erosion event occurring.
- Assist licensees / permittees / contractors in completing an emergency response plan (ERP).
- Notify appropriate agencies, municipalities, band councils or property owners of erosion events where required.

Licensees / Permittees / Contractors

- Complete an emergency response plan (ERP) with support from BCTS as required, and provide a copy of the completed ERP to BCTS upon request.
- Supervisor (designated in the ERP) ensures all employees are familiar with risk areas.
- Ensure employees are trained in response procedures.
- Assess landslides and erosion events and determine reporting requirements, and report to BCTS contact immediately where applicable.
- Respond to erosion events in accordance with the emergency response plan and this manual.

Erosion Event Action Steps

1. **Assessments**. Assess the situation and determine if activities must be shut down in the area. Notify your supervisor and other workers,
2. **Notification**. Notify the BCTS contact of the erosion event as soon as possible. Complete the EMS Incident Report form (EMS CHK-007) as appropriate.
3. **Immediate remedial action**. Take steps to avoid further environmental impacts.
4. **Before you leave the site**. If a shutdown is required, park all equipment in an environmentally safe location. Avoid riparian management areas, steep sideslopes, steep road sections, areas with excessive soil moisture, and areas within reach of standing timber (blowdown). Supervisors must account for all workers before leaving the site.
5. **If environmental damage has occurred.** The BCTS contact and licensee/permitee/contractor contact must review the situation, and obtain specialist advice as necessary. Operational plans must be amended as required. Work in the area may only resume once formal approval has been received from the appropriate agencies.

Agency Referral

Where an erosion event impacts, or shows signs of impacting other resources or private property, BCTS will immediately contact the appropriate agency, municipality, band councils or property owners.

Emergency Response Plan (ERP)

As stated in the scope section of this manual, emergency preparedness and response applies to hazardous materials spills, forest fires, and landslides and other major erosion events. Emergency Response Plans (ERPs) will be completed that will detail the preparedness and response responsibilities for the various parties involved in field activities under the BCTS.

Preparation of an ERP

Before the commencement of field activities, each LPC must prepare an ERP for each license, permit and contract that identifies:

- Emergency contact names, phone numbers, and/or radio frequencies;
- An overview of procedures and response activities for fire, spills and landslide events;
- Information regarding emergency response equipment and testing requirements; and
- Direction to related documents.

Availability of the ERP

The LPC will retain a copy of the ERP, and will provide a copy to BCTS upon request. Copies of the ERP must be available to all persons involved in relevant field activities at the site of the activity.

Note that each worksite must also have the Incident Report form (EMS CHK-007) available at all times.

Linkage Between the ERP and the Wildfire Act and Regulations

Fire Preparedness is influenced by conditions outlined in the Wildfire Act and Regulation. Emergency preparedness and response capability for Fire must be assessed prior to the commencement of any project if the activity is occurring in a season where a risk exists of fire igniting and spreading. Tool requirements are determined at the time of the BCTS/LPC Prework through the use of the ERP template.

Date:______

Appendix A: Emergency Response Plan (ERP) Template

NOTE: The ERP is to be completed by the licensee/permitee/contractor. The BCTS contact will review the completed ERP with the preparer at the pre-work meeting.

PART A: GENERAL INFORMATION

Licensee Name and Contact Information:________________________

Note - this is the person responsible for obtaining the appropriate fire weather information, ensuring employees are trained, and ensuring that testing and tool inspections are completed.

Home Phone:________________________
Work Phone:________________________
Cell Phone:________________________
Radio Frequency:________________________

Type of Activity(s):________________________

Location of Activity(s):________________________

Latitude:______________ **Longitude:**______________

Fire Preparedness Plan also required? (Y/N)______

PART B: CONTACT INFORMATION

BCTS Contact:________________________
Office tel:________________________
After hours tel.:________________________

General Local Emergency Services

Police____________ Ambulance____________ Local/nearest poison control center______________ BC Poison Control Centre 1-800-567-8911

Hospital________________________

Chemical Fires and Transportation Accidents

Environment: emergencies (Enforcement and Environmental Emergencies Branch (Victoria) 1-250-356-9302

Canadian Transport Emergency Centre (CANUTEC) *(for advice/information on hazards, ,response procedures and cleanup)* 1-613-996-6666

Fire Reporting: 1-800-663-5555, or *5555 on the Cantel, and Telus networks, or the appropriate Fire Center tel.______________________

Spill Reporting: Provincial Emergency Program (PEP), ______1-800-663-3456______________________

Ministry of Water, Land and Air Protection regional or district office:______________________

Forest Fire

Immediately report to
1-800-663-5555 or *5555 on the Cantel
and Telus networks, or the appropriate Fire Center
Fire Center tel.______________________
Report fires to BCTS as soon as practical.

When a Fire Occurs:
Stop operations and notify the rest of the crew. Refer to the above list for additional phone numbers if required. The reporting person shall remain available to communicate details of the fire suppression activity taken and what may be required.
The remaining crew shall begin immediate action on the fire to their level of safety and competence. The person in charge of the crew during suppression operations will continue to supervise the efforts until relieved by licensee/ permittee/ contractor representative or forest service personnel.
If Alone:
DO NOT take action on an intense fire yourself. If the fire is beyond your ability, notify the forest service immediately and follow their instructions. Take immediate action on the fire if you believe you can control it yourself. Notify the forest service and licensee/permittee/contractor representative as soon as you feel that the fire can be left alone without spreading out of control. Notify the licensee/permittee/contractor representative.

Complete the Incident Report form EMS CHK-007 and submit it to BCTS.

Hazardous Materials Spill

Report spills of petroleum products >100 L, antifreeze > 5 litres, or pesticides >1 kg within 24 hours to Provincial Emergency Program, 1-800-663-3456.
Report concentrated spills of petroleum products >25 L, antifreeze >5 litre, or pesticides >1 kg to BCTS as soon as possible. Report all spills into or immediately adjacent to a stream, lake or running water to BCTS immediately.

Evaluate the Hazards – identify and evaluate any potential problems that may be encountered during the control, containment and cleanup of spills. Identify the type and volume of the spill. Refer to the Material Safety Data Sheet (MSDS). Have fire extinguishers available if there is a risk of fire.
Take control –Stop operations and shut off equipment and remove any sources of sparks or flames. Ensure fellow workers are notified, and if possible, stop the source of the spill.
Take action – take action within your ability using resources at hand to minimize the spread and the impact of the spill until additional resources and expertise arrive. Utilize heavy equipment where suitable. Use your spill response equipment to initiate containment.
Follow-up – report the spill to agencies as required (see above). All information and details must be documented for follow-up using the shutdown/incident response form. Complete clean-up and required mitigation actions.

Complete the Incident Report form EMS CHK-007 and submit it to BCTS.

Erosion Event

Report to BCTS as soon as possible any:

- **Emergency or potential emergency situations**
  - **loss or imminent loss of life or property**
  - **significant environmental damage**
  - **situations of potential cost of significant government funds or loss of revenue)**
- **Abnormal movement or sedimentation,**
- **A volume of material greater than 250m3 has moved or is at imminent risk of movement**
- **A land area greater than 0.25 ha is disturbed through erosion processes**

Evaluate – assess the situation and determine if activities must be shut down in the area. Notify your supervisor and other workers.
Notification – report the erosion event to the BCTS contact within 24 hours or as soon as practical.
Take immediate remedial action –take steps to avoid environmental impacts if inaction would create a negative impact.
Before you leave the site – if a shutdown is required, park all equipment in an environmentally safe location. Avoid riparian management areas, steep sideslopes, steep road sections, areas with excessive soil moisture, and areas within reach of standing timber. Supervisors must account for all workers before leaving the site.
If environmental damage has occurred – the district contact and licensee/contractor contact must review the situation, and obtain specialist advice. Erosion events must be reported in any of the circumstances noted above.

Complete the Incident Report form EMS CHK-007 and submit it to BCTS.

PART D: FIRE RESPONSE EQUIPMENT & PERSONNEL

List minimum fire equipment* that will be maintained on site for the following Danger Classes, and the equipment locations:

- Danger Classes I & II ______________________________
- Danger Classes III, IV and V ______________________________
  - *list the quantities and locations of all hand tools, water delivery systems, suppression equipment, extinguishers, etc.*

List personnel certified to the S-100 Fire Suppression standard that will be available for Fire Control:

PART E: SPILL RESPONSE EQUIPMENT

☐ None required, or list equipment *:______________________________

** list the number and locations of spill kits*

PART F: TESTING REQUIREMENTS

Type of testing to be completed:

- ☐ **Spill:**
  - ☐ *full mock exercises,*
  - ☐ *review of procedures,*
  - ☐ *employee interviews,*
  - ☐ *equipment testing.*
- ☐ **Fire:**
  - ☐ *full mock exercises,*
  - ☐ *review of procedures,*
  - ☐ *employee interviews,*
  - ☐ *equipment testing.*

Person to complete testing:____

Indicate if the BCTS contact is to be present for any of the testing:__________________________

PART G: SIGNATURES

Signature:__________________________**Date:**__________________________

Licensee/Permittee/Contractor ____

WCB First Aid Equipment Tables

Table 1: "A" Hazard Classification
More Than 20 Minutes Surface Travel Time to Hospital

NUMBER OF WORKERS PER SHIFT	SUPPLIES, EQUIPMENT AND FACILITY	FIRST AID CERTIFICATE REQUIRED FOR ATTENDANT	TRANSPORTATION REQUIRED	OTHER FIRST AID REQUIREMENTS
2-5	Level 1 Kit	Level 1 with Transportation Endorsement	See s. 33.29	
6-10	Level 1 Kit ETV Equipment	Level 1 with Transportation Endorsement	ETV	
11-30	Level 3 Kit Dressing Station ETV Equipment	Level 3	ETV	Unrestricted certificate required in some cases. See s. 33.46
31-50	Level 3 Kit First Aid Room ETV Equipment	Level 3	ETV	Unrestricted certificate required in some cases See s. 33.46
51-200	Level 3 Kit First Aid Room Industrial Ambulance Equipment	Level 3	Industrial Ambulance	Unrestricted certificate required in some cases. See s. 33.46
201 or more	Level 3 Kit First Aid Room Industrial Ambulance Equipment	2 Level 3	Industrial Ambulance	Unrestricted certificate required in some cases See s. 33.46

Table 2: "A" Hazard Classification
20 Minutes or Less Surface Travel Time to Hospital

NUMBER OF WORKERS PER SHIFT	SUPPLIES, EQUIPMENT AND FACILITY	FIRST AID CERTIFICATE REQUIRED FOR ATTENDANT	TRANSPORTATION REQUIRED	OTHER FIRST AID REQUIREMENTS
2-15	Level 1 Kit	Level 1	See s. 33.29	
16-30	Level 2 Kit Dressing Station	Level 2	See s. 33.29	Upgrade of certificate, transportation and equipment required in some cases. See s.33.23
31-300	Level 2 Kit First Aid Room	Level 2	See s. 33.29	Upgrade of certificate, transportation and equipment required in some cases. See s. 33.23
301 or more	Level 2 Kit First Aid Room	2 Level 2	See s. 33.29	Upgrade of certificate, transportation and equipment required in some cases. See s. 33.23

Table 3: "B" Hazard Classification
More Than 20 Minutes Surface Travel Time To Hospital

NUMBER OF WORKERS PER SHIFT	SUPPLIES, EQUIPMENT AND FACILITY	FIRST AID CERTIFICATE REQUIRED FOR ATTENDANT	TRANSPORTATION REQUIRED	OTHER FIRST AID REQUIREMENTS

WCB First Aid Equipment Tables

2-5	Level 1 Kit	Level 1 with Transportation Endorsement	See s. 33.29	
6-15	Level 1 Kit ETV Equipment	Level 1 with Transportation Endorsement	See s. 33.29	
16-50	Level 3 Kit Dressing Station ETV Equipment	Level 3	ETV	Unrestricted certificate required in some cases. See s. 33.46
51-100	Level 3 Kit First Aid Room ETV Equipment	Level 3	ETV	Unrestricted certificate required in some cases. See s. 33.46
101-300	Level 3 Kit First Aid Room Industrial Ambulance Equipment	Level 3	Industrial Ambulance	Unrestricted certificate required in some cases See s. 33.46
301 or more	Level 3 Kit First Aid Room Industrial Ambulance Equipment	2 Level 3	Industrial Ambulance	Unrestricted certificate required in some cases. See s. 33.46

Table 4: "B" Hazard Classification
20 Minutes or Less Surface Travel Time to Hospital

NUMBER OF WORKERS PER SHIFT	SUPPLIES, EQUIPMENT AND FACILITY	FIRST AID CERTIFICATE REQUIRED FOR ATTENDANT	TRANSPORTATION REQUIRED	OTHER FIRST AID REQUIREMENTS
2-5	Basic Kit		See s. 33.29	
6-25	Level 1 Kit	Level 1	See s. 33.29	
26-75	Level 2 Kit Dressing Station	Level 2	See s. 33.29	Upgrade of certificate, transportation and equipment required in some cases. See s. 33.23
76 or more	Level 2 Kit First Aid Room	Level 2	See s. 33.29	Upgrade of certificate, transportation and equipment required in some cases. See 33.23

Table 5: "C" Hazard Classification
More Than 20 Minutes Surface Travel Time to Hospital

NUMBER OF WORKERS PER SHIFT	SUPPLIES, EQUIPMENT AND FACILITY	FIRST AID CERTIFICATE REQUIRED FOR ATTENDANT	TRANSPORTATION REQUIRED	OTHER FIRST AID REQUIREMENTS
2-5	Basic Kit		See s. 33.29	
6-30	Level 1 Kit	Level 1	See s. 33.29	
31-50	Level 1 Kit ETV Equipment	Level 1 with Transportation Endorsement	See s. 33.29	
51-75	Level 3 Kit Dressing Station ETV Equipment	Level 3	See s. 33.29	

76 or more	Level 3 Kit First Aid Room ETV Equipment	Level 3	ETV	

Table 6: "C" Hazard Classification
20 Minutes or Less Surface Travel Time To Hospital

NUMBER OF WORKERS PER SHIFT	SUPPLIES, EQUIPMENT AND FACILITY	FIRST AID CERTIFICATE REQUIRED FOR ATTENDANT	TRANSPORTATION REQUIRED	OTHER FIRST AID REQUIREMENTS
2-10	Basic Kit		See s. 33.29	
11-50	Level 1 Kit	Level 1	See s. 33.29	
51-100	Level 2 Kit Dressing Station	Level 2	See s. 33.29	Upgrade of certificate, transportation and equipment required in some cases. See s. 33.23
101 or more	Level 2 Kit First Aid Room	Level 2	See s. 33.29	Upgrade of certificate, transportation and equipment required in some cases. See s. 33.23

BC Timber Sales
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ENVIRONMENTAL FIELD PROCEDURE

EFP 01 GENERAL

Purpose and Scope

This EFP applies to all BCTS, Licensee, Permittee and Contractor workers involved in any field activities within the scope of the BCTS EMS, including all planning, harvesting, roads and silviculture related activity. It describes general requirements to minimize impacts on the environment. This EFP does not replace the requirements of legislation, licences, permits and contracts.

Pre-work and General Procedures

- Complete a **pre-work** of the project plan with your supervisor.
    - Ensure you understand **your role** in the project plan prior to commencing work.
    - Obtain site maps, and prescriptions and other project documents. Have them readily available.
    - Know the **flagging or marking** standards.
- **Look ahead** and make sure that the project plan is appropriate.
    - **View the area** as required to familiarize yourself with the project plan including, map content, field marking and the location of hazardous or sensitive areas.
    - Ensure that all **resource features** identified on the site map can be located by you on the ground and are identified on the site map. Know the associated management strategies.
    - Report any previously unidentified resource features, values or sensitive areas to your supervisor.
- **Monitor your work** and ensure that the completed work has met the project objectives.
    - Conduct operations to minimize the impact on hazardous or sensitive areas, resource features, water quality, and site productivity. Operate during favourable weather conditions.
    - Have the site map available to you and **know your location** at all times.
    - Inspect equipment regularly and repair as required.
- **Keep the site clean and be prepared for emergencies**
    - Maintain all drainage systems. Fix or report any blocked drainages.
    - Ensure the safe transportation, storage, handling and disposal of fuel, oil and chemical products
    - Keep your equipment maintained to prevent any spills or leaks.
    - When a risk of fire exists, conduct operations in consideration of local fire restrictions and daily fire hazard ratings. Ensure that sufficient fire tools are available.
    - Understand the Emergency Response Plan and your responsibilities in it.
    - Maintain spill kits. Replace used supplies promptly.
- **Know the project shutdown criteria**, if applicable.
- **Contain and dispose of Industrial Waste (waste petroleum products, filters, batteries, coolant, etc.)**
    - Contain all waste daily and remove from the site on a regular basis. Recycle wastes if facilities are available. Dispose of wastes only at appropriate disposal facilities.
    - Provide waste storage areas and spill control measures to prevent contamination of the environment.

STOP WORK

And contact your project supervisor or the BCTS representative if:

- You are uncertain of map content, field marking or the location of hazardous or sensitive areas.
- A previously unidentified cultural, resource feature, value or sensitive area is found.
- You experience unfavourable weather or site conditions that could cause environmental damage.
- You believe the project plan will not work.

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ENVIRONMENTAL FIELD PROCEDURE

EFP 02 PROJECT SUPERVISION

Purpose and Scope

This EFP applies to all Licensee, Permittee and Contractor workers who are responsible for supervising field activities within the scope of the BCTS EMS. It describes the supervisors' responsibilities to prepare and supervise workers in such a manner to prevent unnecessary environmental impacts. This EFP does not replace the requirements of legislation, licences, permits and contracts.

Pre-work

1. Complete a **pre-work** of the project plan with **your project supervisor** and / or the BCTS representative. Understand the information that is provided on the relevant pre-work checklist (Planning Pre-work Checklist EMS CHK 001; Harvesting and Roads Pre-work Checklist EMS CHK 002; or, Silviculture Pre-work Checklist EMS CHK 003). Ensure you obtain all information required to supervise the project and to prepare you for any emergencies.
2. **Prepare for, complete** and **document a pre-work** of the project plan **with all employees, workers** and **sub-contractors** involved in the project:
   - **Review relevant project information** including contract, permit, map or plan, field markings, prescriptions, special conditions, requirements and specifications. Review project logistics, work instructions, environmental field procedures, and emergency response plans as relevant. Provide copies of plans or maps to workers as necessary.
   - **View** the site with employees to familiarize them with resource features, sensitive areas, and special conditions, as relevant to their function and activity.
   - **Document** the pre-work discussion and names of attendees.

While supervising, ensure you:

1. **Look ahead** to make sure plans will work.
   - Check that resource features and sensitive areas shown on the site map can be located by you on the ground.
   - Document any resource features, values or sensitive areas or areas found by you or the workers. Identify them on the map and report them to your supervisor and/or the BCTS representative.
2. **Know the location** of all employees on the site at all times.
3. **IMMEDIATELY STOP WORK** and contact your project supervisor or the BCTS representative if:
   - You are uncertain of the project plan, your responsibilities, or hazardous/sensitive areas.
   - A previously unidentified cultural or resource feature, value or sensitive area is found.
   - You experience unfavourable weather or site conditions that could cause environmental damage.
   - You observe conditions that have the potential for immediate environmental damage.
   - You feel the proposed project plan will not work to achieve the desired outcomes.

While supervising, ensure all employees:

1. **Understand** their roles and responsibilities:
   - Have received all necessary information and instructions.
   - Have relevant EFP's available to them, and follow the requirements of the EFP's.
   - Conduct the works according to the project plan(s).
2. **Notify** you of:
   - any works that do not conform to the plan(s).
   - any situations that have caused or have the potential to cause environmental damage.
3. **Contain waste** and remove it from the site on a regular basis (See EFP-01).
4. **Inspect** equipment regularly and repair as required. Maintain spill kits, replacing used supplies promptly.

Inspect the Works

1. **Inspect current and completed works** to ensure that they conform to the project objectives. In the inspection, review relevant items including:
   - Conformance to the project plan (i.e.: licence/permit/contractual requirements),
   - Conformance to the EMS (i.e.: EFP's/ERP onsite, Preworks documented, EMS training), and
   - Compliance with legislation (i.e.: TDG, WHMIS, FRPA, etc.).
2. **Document your inspection** at a frequency as required in the prework with BCTS. A BCTS Inspection Report (Planning Inspection/Monitoring Form EMS CHK 004; Harvesting and Roads Inspection/Monitoring Form EMS CHK 005 or, Silviculture Inspection/Monitoring Form EMS CHK 006) may be used for this purpose.

Manage Documentation:

1. Keep required documentation onsite:
   - BCTS prework form, and records of your Preworks with workers,
   - Operational plans and other materials provided at the prework, available to relevant workers,
   - Maps, distributed to relevant workers,
   - Emergency Response Plan (ERP) available to all workers,
   - EFP's, available to workers as relevant to their activities,
   - BCTS inspection reports and your self-inspection reports, and
   - Copies of completed Incident Report forms, for any incidents that may have occurred during the work.
2. Provide records for review upon request by BCTS:
   - Training records, and
   - Copies of completed emergency response test reports.

In the case of an emergency or environmental damage:

1. Follow the ERP as required, including reporting to external agencies.
2. Complete an Incident Report (EMS CHK 007) and provide a copy to BCTS for any of required types of incidents.

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ENVIRONMENTAL FIELD PROCEDURE

EFP 03 DEVELOPMENT & PLANNING

Purpose and Scope

This EFP applies to all BCTS, Licensee, Permittee and Contractor workers involved in development and planning activities within the scope of the BCTS EMS. It outlines functional requirements to minimize impacts of these activities on the environment. This EFP does not replace the requirements of legislation, licences, permits and contracts.

Preparation

- Ensure that you have copies of and are familiar with all **standards, guidebooks, and other information** relevant to the scope of work.
- Ensure that all **required assessments have been identified**, and that personnel with appropriate qualifications will complete these assessments.
- At the **pre-work meeting**, discuss details of project approach, designs, layouts, or other project plan requirements including the ability to make changes.

Field Work

- **When conducting field work**, ensure that you:
  - Have copies of any relevant plans that have been prepared by BCTS
  - Consider all comments from stakeholders and other agencies
  - Follow flagging standards
  - Note any discrepancies between the plans and the conditions in the field
- **Consider potential longer-term implications** of the planned work, such as providing future access. If you are not sure about possible longer-term requirements, ask your supervisor for direction.
- **Look at all options** for roads, bridges, and culverts to ensure that they are placed in the best location. Know when you can vary from specifications provided by BCTS, and when you must request approvals.

Completion

- Ensure the following information and requirements, as applicable, are correctly identified and **incorporated into all layout and design work**:
  - FDP/FSP information, Site Plan content, and any amendments.
  - MOF engineering, mapping, boundary, and marking requirements.
  - Any key points noted during reconnaissance.
  - The location of streams, terrain, and other important features including wildlife tree patches and reserves.

  - Any measures to ensure the stability of areas having a moderate or high likelihood of landslides.
  - Road or cutblock boundary(s).
  - Location of end-haul sections, spoil sites and quarry/pits; properly classified soils/rock.
  - Right-of-way design and markings, including landing size and location.
  - Any necessary trails.
  - The harvesting system planned to be used.
  - Appropriate referencing (photo ties, reference points etc.).
- Ensure major crossing site plans are identified and/or completed.
- **Ensure all work is in compliance with applicable requirements.**
- **If you have any concerns** about potential environmental impacts relating to this information and the associated prescriptions, contact your supervisor.

STOP WORK

And contact your project supervisor or the BCTS representative if:

- You are uncertain of the project plan, your responsibilities, or hazardous/sensitive areas.
- A previously unidentified cultural or resource feature, value or sensitive area is found.
- You experience unfavourable weather or site conditions that could cause environmental damage.
- You observe conditions that have the potential for immediate environmental damage.
- You feel the proposed project plan will not work to achieve the desired outcomes.

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ENVIRONMENTAL FIELD PROCEDURE

EFP 04 ROADS, BRIDGES AND MAJOR CULVERTS

Purpose and Scope

This EFP applies to all Licensee, Permittee and Contractor workers involved in road construction, maintenance, inspection and deactivation within the scope of the BCTS EMS. It describes procedures and requirements to minimize impacts of these field activities on the environment. This EFP does not replace the requirements of legislation, licences, permits and contracts.

Road and Bridge Inspections

1. Understand all applicable inspection and engineering requirements. Know which sites and structures require assessments, and who is qualified to do them. Only conduct assessments that you are qualified to do.
2. Review all relevant assessments before conducting the inspection. Understand those assessments and their management implications.
3. Review or walk the project area, as well as the surrounding area of influence, to ensure complete collection and reporting/mapping of all relevant field information.
4. Understand and use the appropriate inspection form. Record all inspection results, identifying any deficiencies or additional inspection requirements, and submit to the project supervisor.

Road Construction, Maintenance and Deactivation

1. **Minimize** the impact on water quality and site productivity:
   - Operate during **favourable weather conditions**.
   - Utilize **sediment control** measures as required, including silt fences, hay bales, rock armouring, swales, water bars, or siltation detention ponds as appropriate.
   - **Clean** introduced debris from ditches, streams and culverts on an on-going basis before any impact can occur.
   - **Minimize erosion** potential of exposed soil surfaces by seeding of disturbed areas.
2. When working on crossings, **know the stream classification** and prescription, including timing windows and measures.
3. Install appropriate water control measures on roads at locations where there is a risk of erosion.
4. Ensure that road surface drainage is directed to drainage structures and is not impeded.
5. Avoid placing road material on bridge decks, or in stream channels or flood plains.
6. Avoid directing water onto unstable slopes or erodable soils; direct water to stable slopes and / or armour outfalls with rock.
7. When re-establishing natural drainage patterns during road deactivation, the road fill should be removed down to the natural stream channel. Fill slopes must be left in a stable condition after removal of culverts or other drainage structures.
8. Control blasting to minimize fly-rock damage and slope instability.
9. Know the locations of end-haul and spoil sites – **follow the plan**.
10. Ensure signage or notification requirements are followed.

Bridge or Major Culvert Installation, Maintenance and Removal

1. **Follow the project plan**. If uncertain, contact the project supervisor.
2. Ensure the work complies with timing windows and other specifications.
3. Plan to install culverts in one day if feasible.
4. Pre-mark the inlet and outlet location of all pipes to ensure they fit to the edges of the road prism. Accommodate skew, slope and amount of embedment, as designed.
5. Know the stream classification and prescriptions for the watercourses affected by the works.
6. **Minimize** the impact on water quality and site productivity:
   - Operate during **favourable weather conditions**. Know the project shut-down criteria.
   - Utilize **sediment control** measures as required, including silt fences, hay bales, or siltation ponds as appropriate.
   - **Clean** introduced debris from ditches, streams and culverts on an on-going basis, and before any plugging can occur.
   - **Minimize erosion** potential of exposed soil surfaces by seeding of disturbed areas.
7. Do not place road material on bridge decks, or in stream channels or flood plains. Remove any material inadvertently placed in these areas.
8. Avoid directing water onto unstable slopes or erodable soils; direct water to stable slopes and / or armour outfalls with rock.
9. In non-fish culvert installations, armour the inflows, outflows and fill slopes to minimize erosion, as required.
10. Dispose of wood culvert/bridge debris in designated sites, outside riparian management areas, or according to pre-work instructions.

Fire Hazard Assessment

1. Complete Hazard Assessments at prescribed intervals in accordance with the Wildfire Regulation. If a hazard exists, it must be abated or removed.
2. If burning is part of the project plan, insure required notification is made, approvals received and conditions followed. Ensure burn area is safe from escape and clear of hazardous/sensitive areas.

STOP WORK

And contact your project supervisor or the BCTS representative if:

- You are uncertain of the project plan, your responsibilities, or hazardous/sensitive areas.
- A previously unidentified cultural or resource feature, value or sensitive area is found.
- You experience unfavourable weather or site conditions that could cause environmental damage.
- You observe conditions that have the potential for immediate environmental damage.
- You feel the proposed project plan will not work to achieve the desired outcomes.

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ENVIRONMENTAL FIELD PROCEDURE

EFP 05 HARVESTING

Purpose and Scope

This EFP applies to all Licensee, Permittee and Contractor workers involved in all phases of harvesting and hauling within the scope of the BCTS EMS. It describes procedures and requirements to minimize impacts of these field activities on the environment. This EFP does not replace the requirements of legislation, licences, permits and contracts.

Falling

1. Fall next to boundaries only when boundaries are clearly visible (know where they are).
2. Retain marked boundary trees where safe to do so. Removal, damaging or cutting of trees outside the falling boundary is prohibited unless authorized.
3. Use extra caution when opening-up adjacent to boundaries and reserves, to minimize damage to standing trees and protect resource features.
4. Follow stream prescriptions when falling, limbing and bucking adjacent to watercourses. Know which streams and gullies require cleaning.
5. Fall trees to facilitate yarding method and direction, unless other resources such as streams or wildlife tree patches may be affected.
6. Know leave-tree, stubbing and retention requirements, and monitor your progress to ensure you meet the objectives.

Yarding, Skidding and Forwarding

1. If yarding or skidding in steep or gullied terrain, ensure you fully understand the yarding/skidding strategies and restrictions in place to prevent soil disturbance and to protect streams.
2. Ensure that your activities do not result in excessive soil disturbance.
3. Know the stream classification and prescriptions for the watercourses within the harvest block. Know and understand the riparian management area requirements (e.g.: machine free zones, riparian reserve zones, etc.).

Loading, Processing and Hauling

1. Minimize decking impacts to standing timber and RMA's.
2. **Before moving equipment** at the end of operations, ensure roadside and landing conditions meet all drainage requirements.
3. **Report** to the project supervisor any road conditions which may adversely affect the environment (e.g.: siltation of streams, lakes or other water bodies, or deterioration of the road).

Fire Hazard Assessment

1. Complete Hazard Assessments at prescribed intervals in accordance with the Wildfire Regulation. If a hazard exists, it must be abated or removed.
2. If burning is part of the project plan, insure required notification is made, approvals received and conditions followed. Ensure burn area is safe from escape and clear of hazardous/sensitive areas.

STOP WORK
And contact your project supervisor or the BCTS representative if:

- You are uncertain of the project plan, your responsibilities, or hazardous/sensitive areas.
- A previously unidentified cultural or resource feature, value or sensitive area is found.
- You experience unfavourable weather or site conditions that could cause environmental damage.
- You observe conditions that have the potential for immediate environmental damage.
- You feel the proposed project plan will not work to achieve the desired outcomes.

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ENVIRONMENTAL FIELD PROCEDURE

EFP 06 FUEL HANDLING

Purpose and Scope

This EFP applies to BCTS, Licensee, Permittee, and Contractor workers involved in fuel handling within the scope of the BCTS EMS. It describes specific requirements to prevent and minimize impacts of fuel on the environment. This EFP does not replace the requirements of legislation, licences, permits and contracts.

Fuel Storage and Handling

1. If you are handling fuel, you must understand the **Emergency Response Plan** (ERP) and your personal responsibilities.
2. **Locate and use** fuel storage sites and **install appropriate spill control** to minimize risk (must be outside riparian areas wherever practicable, and located or graded to prevent spills/leaks from entering streams, lakes or running water).
3. **Keep nozzles and hoses** within the containment area when not in use.
4. **Ensure** that spill kits and fire extinguishers are always available and maintained (replenished after use) at the work site.
5. **Ensure** that mobile tanks have appropriate labelling (e.g.: red diamond 1202 or 1203 labels)
6. **Inspect** regularly all valves, hoses, signs, posted procedures, fire extinguishers, spill kits and taps, and promptly repair or replace all deficiencies.
7. **Inspect** portable fuel and oil containers at roadside and on vehicles daily. Repair or replace if leaking.

Refuelling

1. **Do not** fuel or service equipment within a riparian management area wherever practicable.
2. **No smoking** during fuelling
3. **Do not** leave the fuel nozzle unattended when refuelling. Stay with the nozzle at all times during fuelling.
4. **Make sure** that all valves, nozzles, and fuel containers are secure when refuelling is finished. Use drip containment for nozzles when not in use, or store nozzle in secured upright position.

Spills

1. Follow the **Emergency Response Plan** (ERP) spill response procedure.

STOP WORK

And contact your project supervisor or the BCTS representative if:

- You are uncertain of the project plan, your responsibilities, or hazardous/sensitive areas.
- A previously unidentified cultural or resource feature, value or sensitive area is found.
- You experience unfavourable weather or site conditions that could cause environmental damage.
- You observe conditions that have the potential for immediate environmental damage.
- You feel the proposed project plan will not work to achieve the desired outcomes.

Training Summary

WHMIS = Workplace Hazardous Materials Information System   TDG = Transportation of Dangerous Goods   EMS Level 1 = Awareness   EMS Level 2 = EMS Manual review

EMS Level 3 = Review of Field Manual, EFP's, EOP's   EPRP = Emergency Preparedness & Response Plan   FRPA – Forest Practices and Range Act   Pilot = FSJ pilot project

Contractor:

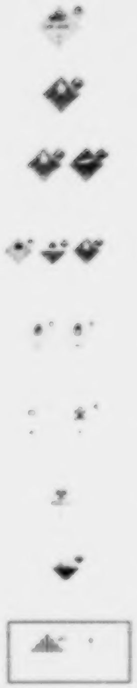
Year:

Worker Name	EPRP					EMS			Regulatory
	S-100 Training	EPRP Action Plans	Spill Response Training	TDG Awareness	WHMIS	EMS Awareness Level 3	EMS Procedure Level 3	EMS Job specific	FRPA, Pilot

REFERENCE GUIDE FOR
TDG (Transportation of Dangerous Goods)

The 4-step snapshot to understanding TDG

- Symbols
  - The symbol is a visual reminder of what type of substance is being transported
  - Symbols are found on Labels & Placards
  - Some examples of the classes you might encounter in the forest industry are:
    - Class 1 – Blasting materials (Explosives)
    - Class 2 – Oxygen, Acetylene, Propane (Gases)
    - Class 3 – Diesel, Gasoline, Solvents (Flammable & Combustible liquids)
    - Class 6 – Solvent compounds, paint removers (Poisonous substances)
    - Class 8 – Battery acids (Corrosive substances)



Class 1: Explosives

Class 2: Gases

Class 3: Flammable & combustible liquids

Class 4: Flammable solids

Class 5: Oxidizing substances

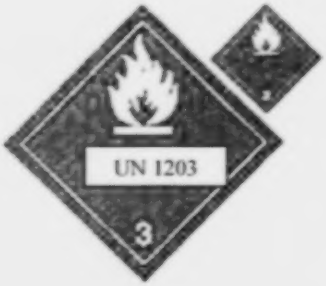
Class 6: Poisonous & Infectious substances

Class 7: Radioactive materials

Class 8: Corrosive substances

Class 9: Miscellaneous products

- Safety Marks
  - Safety Marks are the **first indicator** to the worker that they are dealing with a dangerous good when approaching a container or vehicle load
  - Types of Safety Marks
    - Labels – small diamond shaped marks generally found on smaller containers (i.e. oxygen bottles)
    - Placards – large diamond shaped marks generally found on larger containers or on loaded vehicles transporting dangerous goods
  - Safety Marks will contain the following information:
    - Symbol of the dangerous good (i.e. a flame)
    - Class of the substance (i.e. Class 3)
    - Shipping Name (i.e. Gasoline)
    - PIN (product identification) number (i.e. UN 1203)
  - Use of Safety Marks
    - Whenever a dangerous good is transported
    - When used on larger loads, placards are generally attached at 4 corners of the load vehicle
    - Placards are even required when containers or tanks are empty



- Documentation
  - Class 3 substances (Diesel, Gasoline) generally do not require a shipping document unless the container size is 2000 liters or larger
  - Used oils (generated by the contractor) are not classified under TDG regulation
  - If a shipping document is used, it must contain the following information:
    - Document number
    - Date of shipment
    - Signature of the shipper
    - Shippers name and address and 24 hour contact number
    - Receivers name and address
    - Carriers name
    - Name, Class, PIN, Packing group, and volume of product being shipped
    - Type and number of placards used
- Emergency Response
  - When spills or leaks exceed the quantities listed, it must be reported to:
    - The Police
    - The Employer
    - The Vehicle owner
  - The owner of the goods

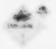
Rules to remember for TDG

1. **Use the right container**
2. **Keep the container capped**
3. **Label the container**
4. **Secure the container in an upright position when in transport**
5. **When unloaded, protect from collision**

REFERENCE GUIDE FOR TDG (Transportation of Dangerous Goods)

The 4-step snapshot to understanding TDG

- Symbols
  - The symbol is a visual reminder of what type of substance is being transported
  - Symbols are found on Labels & Placards
  - Some examples of the classes you might encounter in the forest industry are:
    - Class 1 – Blasting materials (Explosives)
    - Class 2 – Oxygen, Acetylene, Propane (Gases)
    - Class 3 – Diesel, Gasoline, Solvents (Flammable & Combustible liquids)
    - Class 6 – Solvent compounds, paint removers (Poisonous substances)
    - Class 8 – Battery acids (Corrosive substances)

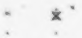

Class 1: Explosives

Class 2: Gases

Class 3: Flammable & combustible liquids

Class 4: Flammable solids

Class 5: Oxidizing substances


Class 6: Poisonous & Infectious substances

Class 7: Radioactive materials

Class 8: Corrosive substances

Class 9: Miscellaneous products

- Safety Marks
  - Safety Marks are the **first indicator** to the worker that they are dealing with a dangerous good when approaching a container or vehicle load
  - Types of Safety Marks
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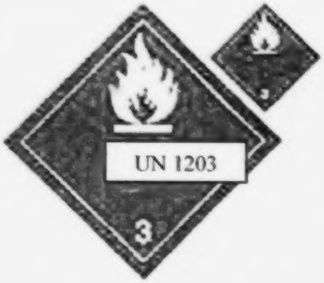
    - Class of the substance (i.e. Class 3)
    - Shipping Name (i.e. Gasoline)
    - PIN (product identification) number (i.e. UN 1203)
  - Use of Safety Marks
    - Whenever a dangerous good is transported
    - When used on larger loads, placards are generally attached at 4 corners of the load vehicle
    - Placards are even required when containers or tanks are empty



- Documentation
  - Class 3 substances (Diesel, Gasoline) generally do not require a shipping document unless the container size is 2000 liters or larger
  - Used oils (generated by the contractor) are not classified under TDG regulation
  - If a shipping document is used, it must contain the following information:
    - Document number
    - Date of shipment
    - Signature of the shipper
    - Shippers name and address and 24 hour contact number
    - Receivers name and address
    - Carriers name
    - Name, Class, PIN, Packing group, and volume of product being shipped
    - Type and number of placards used

Rules to remember for TDG

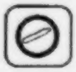
1. **Use the right container**
2. **Keep the container capped**
3. **Label the container**
4. **Secure the container in an upright position when in transport**
5. **When unloaded, protect from collision**

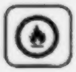
- Emergency Response
  - When spills or leaks exceed the quantities listed, it must be reported to:
    - The Police
    - The Employer
    - The Vehicle owner
  - The owner of the goods

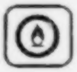
REFERENCE GUIDE FOR WHMIS

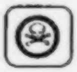
The 3-step snapshot to understanding WHMIS

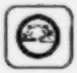
- Understand the symbols
  - The symbol is a visual reminder of what type of substance you will be handling
  - Symbols are found on Labels and MSDS.
  - Some examples of the classes you might encounter in the forest industry are:
    - Oxygen and Acetylene (Compressed Gas)
    - Gasoline and Diesel (Flammable/Combustible)
    - H2S gas from Sour Gas wells (Poisonous material)
    - Battery Acid (corrosive materials)

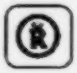

Class A: Compressed Gas


Class B: Flammable and Combustible material

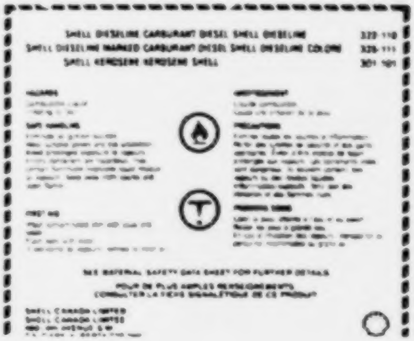

Class C: Oxidizing Material


Class D: Poisonous and Infectious Materials


Class E: Corrosive Material


Class F: Dangerously Reactive Material

- Recognizing Labels
  - Labeling (by Suppliers or Employers) is required on hazardous substances
  - Labels are the **first indicator** to the worker that they are dealing with a hazardous substance
  - Labels must contain the following information:
    - Identification of the substance (eg. Diesel Fuel)
    - Hazard symbol of the substance
    - Precautionary and First Aid measures
    - Reference to Material Safety Data Sheets (MSDS)
  - Types of Labels
    - Supplier – generally an adhesive label attached before shipment
    - Workplace – often a plastic tag attached by a wire or plastic tie to the container by the employer
    - Hand written – writing of the product name by the worker when the substance is dispensed for their individual use.


SHELL DIESELINE CARBURANT DIESEL SHELL DIESELINE
SHELL DIESELINE MARKED CARBURANT DIESEL SHELL DIESELINE COLORE
SHELL KEROSENE KEROSENE SHELL

SEE MATERIAL SAFETY DATA SHEET FOR FURTHER DETAILS

POUR DE PLUS AMPLES RENSEIGNEMENTS
CONSULTER LA FICHE SIGNALETIQUE DE CE PRODUIT

SHELL CANADA LIMITED

- Knowing how to use **Material Safety Data Sheets (MSDS)**
  - An MSDS is a written bulletin issued by the supplier providing specific information about the hazardous substance
  - MSDS will contain the following information
    - Product Name
    - Hazardous ingredients
    - Physical data
    - Fire and Explosion hazard
    - Reactivity data
    - Toxicological properties
    - Preventative measures
    - First Aid measures
    - Preparation information
  - An employer must make the Material Safety Data sheets available to the workers, and provide time for them to read the information before commencing work

CANADIAN
Material Safety Data Sheet

0.05% SULFUR DIESEL FUEL

A. Product Identification

B. Hazardous Components

Personal Protection Information

EMS CHECKLIST GUIDE

Timber Sale # _______________
Contract # __________________

	Prework Information		Inspection Issues
	TRAINING		***TRAINING***
☐	**EMS training verified** (LPC principal has received BCTS Level 3a formal training, LPC workers have received Level 3b)	☐	**Supervisor/Principal interviews confirm awareness** (Level 3a, WHMIS, TDG)
☐	**Training Matrix provided and reviewed** (applicable requirements are understood by LPC)	☐	**Worker interviews confirm awareness** (Level 3b, EFP, ERP, WHMIS, TDG)
	DOCUMENTS & RECORDS		***DOCUMENTS & RECORDS***
☐	**Staff Checklists completed** • Notification of Stakeholders CHK 002 ___ • Prework CHK 003___, CHK 004___, CHK 005___	☐	**BCTS Checklist copies available** • For Supervisors – CHK 002, 003, 004, 005
☐	**Operational documents provided** • TSL ___, Schedules ___, Maps ___ • Silviculture Prescriptions/Site Plans ___	☐	**Operational documents on site** • For Supervisors – TSL, schedules, Site Plans/Prescrip • For Workers - Maps
☐	**EMS documents provided** • EMS Policy___ • EFP 01__, 02__, 03__, 04__, 05__, 06__, 07__, 08__ • EOP 01__, 02__, 03__, 04__, 05__, 06__ • EPR Manual___, ER Plan___ • Incident Form CHK 018___, Record of Tests CHK 020___	☐	**EMS documents available on site** • For Supervisors – EFP 02, EOP, CHK 018, 020, EPRM • For Workers – EFP 01, 03-08; ER Plan, EMS Policy
☐	**Supplement documents provided** • Fire Preparedness Plan__, Provincial Fuel Guide___ • Spill Kit guide___, TDG permit___, WHMIS MSDS___ • Fire risk/tool requirements___	☐	**Supplemental documents available** • For Supervisors – Fire PP, Fuel Guide, Spill Kit guide • For Workers - MSDS
☐	**Record documents provided** • Training EMS 009-001___ or equivalent___ • Preworks CHK 003__, 004__, 005__ or equivalent___ • Inspections CHK 006__, 007__, 013__, or equivalent___	☐	**Standard records maintained on site** • Training (complete___, consistent___, legible___) • Preworks (complete___, consistent___, legible___) • Inspections (complete___, consistent___, legible___)
	EMERGENCY PREPAREDNESS & RESPONSE		***EMERGENCY PREPAREDNESS & RESPONSE***
☐	**Highlights of EPRM reviewed** (Test & Drill requirements, Spill Kit locations and contents)	☐	**Emergency Response records completed** • Incident Reports CHK 018 ___ • Record of Tests CHK 020 ___ • Emergency Response Plan ___
☐	**Highlights of ER Plan reviewed** (Equipment requirements, how to complete form, maintain Plan on site)	☐	**Emergency equipment available on site** • In proper locations___ • In working condition___
☐	**Emergency Response Procedures reviewed** (ensure LPC knows that these procedures must be available to workers)	☐	**Interviews confirm procedure awareness** • For Supervisors___ • For Workers___
☐	**Fire Preparedness Plan reviewed** (applicable if: 1) within fire season, 2) over 4 persons, 3) project duration over 1 month)	☐	**Fire Preparedness Plan on site** (if applicable)
	EQUIPMENT		***EQUIPMENT***
☐	**EMS requirements reviewed** (major leaks repaired or contained)	☐	**Equipment checked for leaks** • Hydraulic lines not excessively frayed or worn • No major leaks occurring or leaks are contained
☐	**Regulatory requirements reviewed** • Fire tools on board (1-pulaski, 1 shovel) • Fire extinguishers on board (1-1A5BC, 1-3A10BC)	☐	**Fire tools are carried on equipment** • Fire Tools • Fire extinguishers
	FUEL (Mobile & Stationary)		***FUEL (Mobile & Stationary)***
☐	**Review critical fuel documents with LPC** • EFP 07 – handling and reporting requirements • Provincial Fuel Guide (Table of Contents, discuss sections pertinent to the project)	☐	**Interview to confirm fuel handling awareness** • Supervisors – Provincial fuel guide and EFP 07 • Workers – EFP 07 • All – understanding of reporting requirements
☐	**Review key EMS issues with LPC** • Fuel must be stored outside of Riparian Areas or high water marks (marine environments) • Pollution must be prevented wherever possible by utilization of spill control and drip containment • Remedial action is taken for all spills	☐	**Check fuel storage locations & surrounding areas** • Located outside of RMA or 4.5 horizontal meters from annual high water marks (marine environments) • Appropriate spill control (berms, tarps, graded sites) & drip containment in place • Spills have been appropriately remediated
☐	**Review key regulatory issues with LPC** • Tanks greater than 450 liter capacity require inspections and stamps OR permit numbers applied (until Dec 2004) • Mobile tanks governed by TDG, Stationary tanks governed by BC Fire Code (Provincial Fuel guide captures these issues)	☐	**Fuel containers meet legal requirements** • Mobile Tanks > 450l have stamps or permit numbers applied (Permit # SH 6216) • Stationary Tanks (> 230l) have effective spill control, collision protection, properly secured in cradle)

EMS CHECKLIST GUIDE

Timber Sale # ________________
Contract # ________________

	Prework Information		Inspection Issues
	FUEL (Mobile & Stationary)		*FUEL (Mobile & Stationary)*
☐	**Review key fuel issues with LPC** • Containers appropriate for substance carried • Containers properly secured • Containers must not leak • Containers must be capped and vented • Containers must be labeled • Drip containment vessel or practices are implemented	☐	**Check the following for *mobile tanks:*** • Hoses and nozzles in good condition & not leaking • Tanks are sitting on a cushioned base (rubber, wood) • Tanks are securely fastened to the transport vehicle • Nozzles are drip contained and secured after use • WHMIS and TDG labels are attached • Response equipment is available (any size extinguisher, spill kits with appropriate contents) **Check the following for *stationary tanks:*** • Same requirements as for mobile tanks • Hoses over 4.5m in length are in hangers or retractors • Shear valves installed in gravity-fed tanks • Breakaway valves installed in hoses • A 20BC fire extinguisher is available
☐	**Review key marine environment issues with LPC (where applicable)** • Review Section 5 of the Provincial Fuel Guide with LPC • Conduct a Risk Assessment with LPC to verify storage locations, spill control measures, etc. • Discuss training measures required for personnel handling or storing fuel	☐	**Check the following for *stationary tanks* in marine environments:** • A certified tank (ULC or equivalent) is in use • Tanks are mounted on a stable foundation or cradle and cushioned • Located outside annual high water marks (4.5m) • Appropriate valves are in place (shear, anti-siphon, solenoid, positive shut-off, lockout capable) to protect against accidental loss of product • Tanks > 230 liters have secondary containment (must hold 110% of volume) • Lines from floating docks to land utilize solid piping with flexible connectors • Visual inspections are conducted daily and all leaks promptly repaired • Two 20BC fire extinguishers located at site

BCTS staff: ____________________

Date: ______________

BCTS
BC Timber Sales

Environmental Management System

PREWORK REPORT

Functional Area:
DEVELOPMENT and PLANNING

Form:
EMS CHK-001

Section A

Business Area:	Field Team:	ORCS/ARCS File #	Project ID (TSL/Contract/Permit)
Company:		On-site Contact: Alternate:	
Description (Block, Road, Major Culvert)		General Operating Area	
Development/Planning ☐ Site Plan/Surveys ☐ Road layout ☐ Block layout ☐ Cruising ☐ Recce's ☐ Other: ____		Location Details (specific roads, blocks, structures, etc)	
		Prework conducted by	☐ Office __/__/__ (d/m/y) ☐ Field __/__/__ (d/m/y) ☐ Telephone __/__/__ (d/m/y)

Section B

Notification to Stakeholders

☐ DFO	/ / (d/m/y)	☐ First Nations	/ / (d/m/y)	☐ Range Holders	/ / (d/m/y)	☐ Rec Users	/ / (d/m/y)
☐ MWLAP	/ / (d/m/y)	☐ Guides	/ / (d/m/y)	☐ Community	/ / (d/m/y)	☐ Private owner	/ / (d/m/y)
☐ Highways/DOT	/ / (d/m/y)	☐ Trappers	/ / (d/m/y)	☐ C. Watersheds	/ / (d/m/y)	☐ Tourist Operator	/ / (d/m/y)
☐ First Nations	/ / (d/m/y)	☐ Adj Licensee	/ / (d/m/y)	☐ Mineral holders	/ / (d/m/y)	____________	/ / (d/m/y)

Sec C

STATUS

Yes: Reviewed (comments may be added for clarification – Section E)
N/D: Not discussed
N/A: Not applicable

Project Risk Ranking

☐ High ☐ Medium ☐ Low ☐ Other____________

Section D

	Requirements	Status		Requirements	Status
	Documentation and Records		28	Stream cleaning requirements	
1	Operational Plans *(SP, SMP)*		29	Other assessments	
2	Professional Plans *(Road Design)*		30	Agency referral comments from plan submissions	
3	Environmental Operating Procedures (EOP)		31	Boundary location / marking requirements	
4	Environmental Field Procedures (EFP)		32	Site clean-up (garbage etc.)	
5	EMS Records *(Training, Preworks, Inspections, Incident, ERP Test)*		33	BCTS engineering standards	
6	Contract Documents		34	BCTS mapping standards	
7	Relevant Legislation		35	Air photos	
8	Bridge design Documents		36	Maps	
9	Certificate of Insurance		37	SMZ / WTPs / Species at risk / WHAs / Ungulate winter ranges	
10	Other Documents____________________		38	Required reports	
	Emergency Preparedness		39	BCTS Inspection ____________ ________	
11	Fire response equipment & Personnel (as per ERP)		40	LWCP / Contractor inspection ________________	
12	Wildfire Act & Reg (i.e. Hazard Assessment, High-risk activities)		41	Insurance requirements	
13	Critical Fire Issues (i.e. Fire danger class, ERP, special precautions)		42	Quality control standards / checks	
14	WCB requirements			**Cutblock Development**	
15	TDG / WHMIS		43	Resource features	
16	ERPs (spills, fire, erosion)		44	Retention objectives	
17	Communications *(radio, phone availability)*		45	Deflection lines	
18	Other conditions:		46	Harvesting systems	
	General Conditions		47	Other	
19	Access (type, gates/keys)			**Site Plan**	
20	Camp standards		48	Content requirement for SP's	
21	HLP / LUP		49	Ecological classification	
22	FDP/FSP		50	Special resource management (e.g.: species at risk, WTPs, etc.)	
23	Terrain assessments			**Layout – Roads & Major Structures**	
24	Soil protection measures		51	Private property or other significant boundaries	
25	Stream assessments		52	Road survey and geometric design requirements	
26	Riparian Mgmt Areas		53	Site plan survey requirements / standards	
27	In-stream timing windows		54	Major structure design requirements / standards	

BCTS
BC Timber Sales

Environmental Management System

PREWORK REPORT

Functional Area:
DEVELOPMENT and PLANNING

Form:
EMS CHK-001

		Requirements	Status		Requirements	Status
Section D	55	Output requirements			**Training and Awareness**	
		Fuel and Industrial Waste		61	Spill Kit requirements *(as per ERM)*	
	56	Location of fuel cache, containers		62	Training requirements *(training matrix)*	
	57	Fuel Storage *(proper container, labels, spill control, protection)*		63	Training verified *(supervisor, crew)*	
	58	Fuel Dispensing *(drip containment, secured)*				
	59	Fuel Transportation *(secured, labelled if required)*				
	60	Containment and disposal of waste products				

	Req #	Comments
Section E		

Section F Con't

Conducted by ______________ BCTS Staff/ LPC Supervisor ______________ Signature ______________

Received by ______________ BCTS Staff/ LPC Supervisor/ LPC Worker ______________ Signature ______________

BCTS
BC Timber Sales

Environmental Management System

PREWORK REPORT

Functional Area:
HARVESTING AND ROADS

Form:
EMS CHK-002

Section A

Business Area:	Field Team:	ORCS/ARCS File #	Project ID (TSL/Contract/Permit)
Company:		On-site Contact: Alternate:	
Description (Block, Road, Major Culvert)		General Operating Area	
Harvesting ☐ Falling ☐ Cable ☐ Helicopter ☐ Yarding/Loading ☐ Forwarding ☐ Other: _____	**Roads** ☐ Construction ☐ Maintenance ☐ Deactivation/Rehabilitation **Major Structures** ☐ Construction ☐ Maintenance ☐ Deactivation	Location Details (specific roads, blocks, structures, etc) Prework conducted by	☐ Office ___/___/___ (d/m/y) ☐ Field ___/___/___ (d/m/y) ☐ Telephone ___/___/___ (d/m/y)

Section B

Notification to Stakeholders

☐ DFO	/ / (d/m/y)	☐ Guide	/ / (d/m/y)	☐ C. Watersheds	/ / (d/m/y)	☐ Tourist Operator	/ / (d/m/y)
☐ MWLAP	/ / (d/m/y)	☐ Trappers	/ / (d/m/y)	☐ Mineral holders	/ / (d/m/y)	☐ Other	
☐ Highways/DOT	/ / (d/m/y)	☐ Adj Licensee	/ / (d/m/y)	☐ Rec Users	/ / (d/m/y)	____________	/ / (d/m/y)
☐ First Nations	/ / (d/m/y)	☐ Range Holder	/ / (d/m/y)	☐ Private owner	/ / (d/m/y)		

Sec C

STATUS
Yes : Reviewed (comments may be added for clarification – Section E)
N/D: Not discussed
N/A: Not applicable

Project Risk Ranking
☐High ☐Medium ☐Low ☐Other___________

Section D

	Requirements	Status		Requirements	Status
	License & Contractual			**Documents and Records**	
1	Critical Factor Sheet (as advertised)		27	EMS Documents *(EFP, ERM, ERP, Checklists, etc)*	
2	T.S. Licence Document (schedules)(Official Notices)		28	EMS Records *(Preworks, inspections, training, ER tests, Incident)*	
3	Contract documents and schedules				
4	Fallers/Loggers Map & Specific Comments			**Inspections/Monitoring/Reporting**	
5	Site Plan		29	BCTS Inspection frequency ____________	
6	Special Requirements / Features (e.g.: WTPs, Retention, RMAs, SMZ, MFZs)		30	LPC inspection frequency ____________	
7	Specific requirements resulting from assessments (e.g.: visuals, AIA)		31	Shutdown & incident reporting criteria (fire, spills, erosion events)	
8	Schedule of operations				
9	Road or Works Permit Document and approvals			**Fuel and Industrial Waste**	
10	Road crew map		32	Location of fuel cache, containers	
11	Plans, profiles & cross sections		33	Fuel Storage *(proper container, labels, spill control, protection)*	
12	Geo Technical report		34	Fuel Dispensing *(drip containment, secured)*	
13	End hauling / spoil sites		35	Fuel Transportation *(secured, labelled if required)*	
14	Seasonal deactivation		36	Containment and disposal of waste products	
15	Permanent deactivation				
16	Structural designs, e.g., bridges, culverts etc.			**Emergency Preparedness**	
17	Fish timing windows and measures, and all agency requirements		37	Fire response equipment & Personnel (as per ERP)	
18	Signage needs		38	Wildfire Act & Reg (i.e. Hazard Assessment, High-risk activities)	
19	Sediment control measures		39	Critical Fire Issues (i.e. Fire danger class, ERP, special precautions)	
20	Road Use Permit requirements, approvals		40	Spill kit requirements *(as per ERM)*	
21	Known safety or environmental hazards		41	TDG / WHMIS requirements	
22	Scheduling of maintenance / deactivation		42	Communications *(radio, phone availability)*	
23	Hazard assessments, fire weather index information, fire response equipment assessments				
24	Emergency response plan *(to be located on site)*			**Training and Awareness**	
25	WCB requirements and notification if required		43	Training requirements *(training matrix)*	
26	Amendment Process & Standards for Amendments		44	Training verified *(supervisor, crew)*	

BCTS
BC Timber Sales

Environmental Management System

PREWORK REPORT

Functional Area:
HARVESTING AND ROADS

Form:
EMS CHK-002

	Req #	Comments
Section E		

BCTS
BC Timber Sales

Environmental Management System

PREWORK REPORT

Functional Area:
HARVESTING AND ROADS

Form:
EMS CHK-002

Section F Con't

Conducted by ______________________ BCTS Staff/ LPC Supervisor ______________________ Signature ______________________

Received by ______________________ BCTS Staff/ LPC Supervisor/ LPC Worker ______________________ Signature ______________________

BCTS BC Timber Sales	*Environmental Management System* **PREWORK REPORT** **Functional Area: SILVICULTURE** Form: **EMS CHK-003**

Section A

Business Area:	Field Team:	ORCS/ARCS File #	Project ID (TSL/Contract/Permit)
Company:		On-site Contact: Alternate:	
Description (Block, Road, Major Culvert)		General Operating Area	
Silviculture ☐ Herbicide/Pesticide application ☐ Planting ☐ Site prep ☐ Surveys	☐ Deactivation/Rehabilitation ☐ Prescribed Burning ☐ Other: ____	Location Details (specific roads, blocks, structures, etc)	
		Prework conducted by	☐ Office/Telephone __/__/__ (d/m/y) ☐ Field __/__/__ (d/m/y)

Section B

Notification to Stakeholders

☐ DFO	/ / (d/m/y)	☐ Range Holder	/ / (d/m/y)	☐ Guides	/ / (d/m/y)	☐ Private owner	/ / (d/m/y)
☐ MWLAP	/ / (d/m/y)	☐ Trappers	/ / (d/m/y)	☐ C. Watersheds	/ / (d/m/y)	☐ Tourist Operator	/ / (d/m/y)
☐ First Nations	/ / (d/m/y)	☐ Adj Licensee	/ / (d/m/y)	☐ Rec Users	/ / (d/m/y)	________	/ / (d/m/y)

Sec C

STATUS

Yes : Reviewed (comments may be added for clarification – Section E)
N/D: Not discussed
N/A: Not applicable

Project Risk Ranking

☐High ☐Medium ☐Low ☐Other________

Section D

	Requirements	**Status**		**Requirements**	**Status**
	Documentation		28	Soil protection measures	
1	Contract and schedules		29	Stream assessments	
2	Pesticide Use Permit		30	Riparian Mgmt Areas	
3	Pesticide Service Licence Number		31	SMZ / WTPs	
4	Applicators Certificate		32	Other assessments	
5	Operational Plans *(SP, SMP)*		33	Security Deposit	
6	Higher Level Plans *(FDP / FSP)*		34	Air photos	
7	Relevant Legislation		35	Maps (project, treatment)	
8	EFPs & EOP's		36	Required reports	
9	EMS Records *(Training, Preworks, Inspections, Incident, ERP Test)*		37	BCTS Inspection frequency ________	
10	Applicable insurance form		38	LPC inspection frequency ________	
11	Certificate of Insurance		39	Inspection standards / checks	
12	Other Documents ________		40	Agency referral comments from plan submissions / publication	
	Emergency Preparedness & Response		41	Post-treatment specifications	
13	Wildfire Act & Reg (i.e. Hazard Assessment, High-risk activities)		42	Performance penalties	
14	Fire response equipment & Personnel (as per ERP)		43	Payment procedures	
15	Critical Fire Issues (i.e. Fire danger class, ERP, special precautions)		44	Insurance requirements	
16	Spill Kit requirements (i.e. minimums, locations, etc)			**Planting**	
17	ERPs (spills, fire, erosion)		45	Seedling handling / storage	
18	Communications *(radio, phone availability)*		46	Review seedling allocation sheet against planting prescription.	
19	WCB requirements (including notification)		47	Seedling micro site selection	
20	Safety equipment / first aid kit		48	Review elevation constraints *(changing of stock, new location)*	
21	TDG			**PUPs / PMPs**	
22	WHMIS		49	Treatment Unit Areas	
	General Conditions		50	Rate/Volumes/Mix	
23	Access (type, gates/keys)		51	PFZs and Buffers	
24	Camp standards		52	Signage	
25	Site clean-up (garbage etc.)		53	Pre-treatment Recces	
26	Boundary location / marking requirements (strip lines, plots)		54	Stakeholder Notification	
27	Terrain assessments		55	Restrictions	

BCTS
BC Timber Sales

Environmental Management System

PREWORK REPORT

Functional Area:
SILVICULTURE

Form:
EMS CHK-003

Section D

	Requirements	Status
	Planting - continued	
	Handling & Storage	
56	Pickup Location:	
57	Pickup Scheduling:	
58	On-site Storage:	
59	Return of Containers:	
	Application	
60	Treatment Schedule:	
61	Pesticide Free Zones	
62	Buffers:	
63	Problem Areas:	
64	Equipment:	
65	Method / Technique:	
66	Equipment Calibration:	
67	Weather Conditions:	
68	Record Keeping:	
	Aerial	
69	MOF Provincial Calibration Met	
70	Approved Provincial Carrier	
71	Approved Provincial Carrier Pilot	

	Requirements	Status
	Surveys	
72	Survey cards	
73	Work progress plan	
74	Survey confidence limits	
75	Silviculture treatment recommendations	
76	SP amendment recommendations	
77	Survey design, coverage, minimum plots.	
78	Procedures for completing surveys	
79	Survey design, coverage, minimum plots.	
80	Inventory updates & Forest Cover Attribute map	
81	Other:	
	Fuel and Industrial Waste	
82	Location of fuel cache, containers	
83	Fuel Storage *(proper container, labels, spill control, protection)*	
84	Fuel Dispensing *(drip containment, secured)*	
85	Fuel Transportation *(secured, labelled if required)*	
86	Containment and disposal of waste products	
	Training and Awareness	
87	Training requirements *(training matrix)*	
88	Training verified *(supervisor, crew)*	

Section E

Req #	Comments

BCTS
BC Timber Sales

Environmental Management System

PREWORK REPORT

Functional Area:
SILVICULTURE

Form:
EMS CHK-003

Section F Con't

Conducted by ______________ BCTS Staff/ LPC Supervisor ______________ Signature ______________

Received by ______________ BCTS Staff/ LPC Supervisor/ LPC Worker ______________ Signature ______________

BCTS
BC Timber Sales

Environmental Management System
INSPECTION/MONITORING REPORT

Functional Area:
PLANNING

Form:
EMS CHK-004

☐ ***INSPECTION (complete Section A-G)***
☐ ***MONITORING (complete Section A, B, & E)***

Section A

Business Area:	*Field Team:*	*File Number:*	*Project ID (TSL/contract)*	*ORCS/ARCS File #*
Company:		*On-site Contact:* *Alternate:*		
Description (Block, Road, Major Culvert)		*General Location (operating area)*		
Development/Planning ☐ Site Plan/Survey ☐ Road layout	☐ Block Layout ☐ Cruising ☐ Other:	*Date of Inspection/Monitoring:*	*Completed by (name):*	

Section B

Type of Report	Inspection Stage	Inspection Method	**Operational Status** (e.g.: activity, % complete, weather, etc.)	**Location Details** (specific roads, blocks, structures, etc.)
Monitoring ☐BCTS ☐LPC Inspection ☐BCTS ☐LPC	☐Initial ☐Progress ☐Final	☐Ground ☐Aerial		

Section C

STATUS	**Yes** : Acceptable (comments may be added for clarification – Section E) **No**: requirement is unacceptable and corrective action is necessary (Section F) **NI**: not inspected **N/A**: Not applicable	**ITS required**: for significant or repeat non-conformance, potential non-compliance, or Incident (as defined in the ERM and EOP-06).

		Requirements	Status		Requirements	Status
		Operational			**Operational - continued**	
		General Issues		29	Road properly referenced (photo ties, reference points etc.)	
	1	Contract requirements are met		30	End-haul sections and spoil sites identified	
	2	Final Road & Block design conforms to approved FDP / FSP		31	Geo-tech recommendations addressed	
	3	Required assessments completed (terrain, fish, visual, etc.)		32	Quarry / pits identified	
	4	Assessment information is correctly incorporated into plan		33	Soils / rock properly classified	
	5	Streams identified and mapped		34	Major crossing site plans completed	
	6	Terrain, soil and other features identified and mapped			**Environmental Management System (EMS)**	
	7	WTP / Reserves identified			**Spill Kits**	
	8	Correct ribbon marking is used		35	• On site	
	9	Mapping standards are met		36	• Location known	
	10	Output / report requirements are met		37	• Workers trained in use	
		Cutblocks		38	• Contents maintained	
	11	Boundary properly located			**Emergency Response**	
	12	Boundary incorporates wind-throw hazard		39	• ER Plan *(familiar w/ location & responsibilities)*	
	13	Resource features accurately located and mapped		40	• Tests & Drills *(conducted, documented)*	
	14	Trails (backspar, temporary crossings) accurately located & mapped		41	• Industrial Waste *(collected and appropriately disposed)*	
	15	Deflection lines run and harvesting standards met		42	• Spills, Fires, Erosion Events *(reported & documented)*	
	16	Appropriate harvesting system selected		43	• Refuelling Sites *(appropriate location)*	
	17	Retention objectives met		44	• Communication *(means on site – cell, radio, sat)*	
		Site Plans			**Fire Response Equipment**	
	18	Management development of resources (e.g.: species at risk, WTP)		45	• On site (as per ERP)	
	19	Proper ecological classification		46	• Location known	
	20	Proper assessment of streams / riparian management strategies		47	• Workers trained in use	
	21	Appropriate gully management strategies		48	• Equipment tested & maintained	
	22	Proper soil classification			**Comprehension & Training**	
	23	Appropriate management of forest health		49	• Prework *(conducted and documented)*	
	24	Appropriate regeneration strategy		50	• Project Plan *(workers know pertinent detail & understand)*	
		Roads & Major Structures – Layout and Design		51	• Maps *(workers know location & understand legends)*	
	25	Sufficient preliminary recce conducted		52	• EMS Level 3 Mgmt/Worker Training *(received, documented)*	
	26	Road meets BCTS standards		53	• S-100, WHMIS, TDG Training *(received, documented)*	
	27	Road right-of-way appropriate		54	• EFP *(readily available, understood)*	
	28	Landing size and location appropriate		55	• Spill/Fire/Erosion reporting *(know thresholds, procedure)*	

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BC Timber Sales

Environmental Management System

INSPECTION/MONITORING REPORT

Functional Area:
PLANNING

Form:
EMS CHK-004

	EMS Requirements	Status		EMS Requirements	Status
	Document & Record Control		63	• EFP *(readily available to workers)*	
56	• Monitoring/Inspections *(conducted, documented)*			**Implementation**	
57	• Emergency Response Plan		64	• Workers conforming to EFP's	
58	• Contract, License, Permit		65	• Fuel Storage *(container, labels, spill control, protection)*	
59	• Plans *(SP, Road layout & design)*		66	• Fuel Dispensing *(drip containment, secured)*	
60	• Fire Hazard Assessment Form completed (i.e. 3 or 6 months)		67	• Fuel Transportation *(secured, labelled if required)*	
61	• Maps *(legible, accurate, available)*		68	• EFP *(readily available to workers)*	
62	• Incident Reports *(documented, submitted to BCTS)*				

COMMENT SECTION – Monitoring and Inspections (Include # identifier)

Section E

BCTS
BC Timber Sales

Environmental Management System

INSPECTION/MONITORING REPORT

Functional Area:
PLANNING

Form:
EMS CHK-004

ACTION PLAN/CORRECTIVE ACTION SECTION

Section F

Comments (include # identifier)	**Actions**	**By Who**	**Due Date**

Section G

Inspected by (print): ______________________________

Signature: ______________________________

Date of Inspection: ____________________

Received by (print): ______________________________

Signature X: ______________________________

(signing does not imply agreement with findings)

Delivery Method:
Email ☐ Fax ☐ Mail ☐ Hand Delivered ☐

BCTS
BC Timber Sales

Environmental Management System
INSPECTION/MONITORING REPORT

Functional Area:
HARVESTING AND ROADS

Form:
EMS CHK-005

☐ ***INSPECTION (complete Section A-G)*** ☐ ***MONITORING (complete Section A, B, & E)***

Section A	*Business Area:*	*Field Team:*	*File Number:*	*Project ID (TSL/contract)*	*ORCS/ARCS File #*
	Company:		*On-site Contact:* *Alternate:*		
	Description (Block, Road, Major Culvert)		*General Location (operating area)*		
	Date of Inspection/Monitoring:		*Completed by (name & company):*		
	Harvesting ☐ Falling ☐ Cable ☐ Helicopter	☐ Yarding/Loading ☐ Forwarding ☐	***Roads*** ☐ Construction ☐ Maintenance ☐ Deactivation/Rehabilitation		***Major Structures*** ☐ Construction ☐ Maintenance ☐ Deactivation

	Type of Report	Inspection Stage	Inspection Method	Operational Status (e.g.: activity, % complete, weather, etc.)	Location Details (specific roads, blocks, structures, etc.)
Section B	Monitoring ☐BCTS ☐LPC Inspection ☐BCTS ☐LPC	☐Initial ☐Progress ☐Final	☐Ground ☐Aerial		

Section C	**STATUS**	**Yes** : Acceptable (comments may be added for clarification – Section E) **No:** requirement is unacceptable and corrective action is necessary (Section F) **N/I**: not inspected **N/A**: Not applicable	**ITS required**: for significant or repeat non-conformance, potential non-compliance, or Incident (as defined in the ERM and EOP-06).

	Requirements	**Status**		**Requirements**	**Status**
	Operational			**EMS - continued**	
1	Road/Trail/Landing Construction *(signage, boundaries)*		26	• Tests & Drills *(conducted, documented)*	
2	Major Structure Installations *(bridges & culverts)*		27	• Industrial Waste *(collected and appropriately disposed)*	
3	Sediment Control		28	• Spills, Fires, Erosion Events *(reported & documented)*	
4	Road/Trail use *(restrictions, etc.)*		29	• Refuelling Sites *(appropriate location)*	
5	Permanent/temporary access *(max %, area, etc.)*		30	• Communication *(means on site – cell, radio, sat)*	
6	Falling *(external/internal boundaries, leave trees, etc.)*			**Fire Response Equipment**	
7	Riparian Management *(debris mgmt, crossings, MFZ's, etc)*		31	• On site	
8	Soil Conservation *(disturbance, etc)*		32	• Location known	
9	Revenue Management *(utilization, marking, etc)*		33	• Workers trained in use	
10	Public Safety *(roads, danger trees, etc)*		34	• Equipment tested & maintained	
11	Forest Health /protection *(piling, FFPSR, knockdown, etc)*			**Comprehension & Training**	
12	Road/Trail maintenance *(water management, integrity)*		35	• Prework *(conducted and documented)*	
13	Site Deactivation/rehabilitation *(signage, access, etc)*		36	• Project Plan *(workers know pertinent detail & understand)*	
14	Plans and Profiles *(WTP, RMA, retention, terrain, etc)*		37	• Maps *(workers know location & understand legends)*	
15	Schedule of Operations *(conformance with)*		38	• EMS Level 3 Mgmt/Worker Training *(received, documented)*	
16	Partial Harvest *(within damage criteria, basal area achieved)*		39	• S-100, WHMIS, TDG Training *(received, documented)*	
17	Professional certifications *(conforming to design/prescription)*		40	• EFP *(readily available, understood)*	
18	Estimated disturbed area *(Roads & Landings – ha)* %		41	• Spill/Fire/Erosion reporting *(know thresholds, procedure)*	
19	Soil Disturbance *(☐surveyed, ☐estimated)* %			**Document & Record Control**	
20	Heritage/Cultural Issues *(CMT, protected sites)*		42	• Monitoring/Inspections *(conducted, documented)*	
	Environmental Management System (EMS)		43	• Emergency Response Plan	
	Spill Kits		44	• Contract, License, Permit	
21	• On site		45	• Plans *(SP, Road layout & design)*	
22	• Location known		46	• Fire Hazard Assessment completed (i.e. 3 or 6 months)	
23	• Workers trained in use		47	• Maps *(legible, accurate, available)*	
24	• Contents maintained		48	• Incident Reports *(documented, submitted to BCTS)*	
	Emergency Response		49	• EFP *(readily available to workers)*	
25	• ER Plan *(familiar w/ location & responsibilities)*				

BCTS
BC Timber Sales

Environmental Management System

INSPECTION/MONITORING REPORT

Functional Area:
HARVESTING AND ROADS

Form:
EMS CHK-005

		Requirements	Status		Requirements	Status
		EMS - continued				
		Implementation				
	50	• Workers conforming to EFP's				
	51	• Fuel Storage *(container, labels, spill control, protection)*				
	52	• Fuel Dispensing *(drip containment, secured)*				
	53	• Fuel Transportation *(secured, labelled as required)*				

COMMENT SECTION – Monitoring and Inspections (Include # identifier)

Section E

BCTS BC Timber Sales	*Environmental Management System* **INSPECTION/MONITORING REPORT** **Functional Area:** **HARVESTING AND ROADS** **Form:** **EMS CHK-005**

ACTION PLAN/CORRECTIVE ACTION SECTION

	Comments (include # identifier)	Actions	By Who	Due Date
Section F				

Section G

Inspected by (print): ______________________________

Signature: ______________________________

Date of Inspection: ________________________

Received by (print): ______________________________

Signature *X*: ______________________________

(signing does not imply agreement with findings)

Delivery Method:

Email ☐ Fax ☐ Mail ☐ Hand Delivered ☐

BCTS
BC Timber Sales

Environmental Management System

INSPECTION/MONITORING REPORT

Functional Area:
SILVICULTURE

Form:
EMS CHK-006

☐ ***INSPECTION (complete Section A-G)*** ☐ ***MONITORING (complete Section A, B, & E)***

Section A	*Business Area:*	*Field Team:*	*File Number:*	*Project ID (TSL/contract)*	*ORCS/ARCS File #*
	Company:		*On-site Contact:* Alternate:		
	Description (Block, Road, Major Culvert)		*General Location (operating area)*		
	Silviculture ☐ Herbicide/Pesticide application ☐ Planting ☐ Site prep	☐ Surveys ☐ Deactivation/Rehabilitation ☐ Prescribed Burning ☐ Other: ____	*Date of Inspection/Monitoring:*		*Completed by (name):*

Section B	**Type of Report**	**Inspection Stage**	**Inspection Method**	**Operational Status** (e.g.: activity, % complete, weather, etc.)	**Location Details** (specific roads, blocks, structures, etc.)
	Monitoring ☐BCTS ☐LPC Inspection ☐BCTS ☐LPC	☐Initial ☐Progress ☐Final	☐Ground ☐Aerial		

Section C	**STATUS**	**Yes** : Acceptable (comments may be added for clarification – Section E) **No:** requirement is unacceptable and corrective action is necessary (Section F) **N/I:** not inspected **N/A:** Not applicable	**ITS required**: for significant or repeat non-conformance, potential non-compliance, or Incident (as defined in the ERM and EOP-06).

Section D		**Requirements**	**Status**		**Requirements**	**Status**
		Operational			**EMS - continued**	
	1	Contract requirements met			**Fire Response Equipment**	
	2	SP. SMP requirements are met		25	• On site	
	3	Sediment control requirements met		26	• Location known	
	4	Road / trail use (restrictions, etc.)		27	• Workers trained in use	
	5	External / internal boundaries correctly marked, adhered to		28	• Equipment tested & maintained	
	6	Riparian management requirements met (crossings, MFZs etc.)			**Comprehension & Training**	
	7	Soil conservation measures employed (disturbance etc.)		29	• Prework *(conducted and documented)*	
	8	Public safety issues employed (signage, stakeholder notification)		30	• Project Plan *(workers know pertinent detail & understand)*	
	9	Additional plan, prescription, or assessment requirements met (WTP, RMA, retention, terrain, etc.)		31	• Maps *(workers know location & understand legends)*	
	10	Schedule of operations (conformance with)		32	• EMS Level 3 Mgmt/Worker Training *(received, documented)*	
	11	Output / report requirements met		33	• S-100, WHMIS, TDG Training *(received, documented)*	
	12	Survey standards met		34	• EFP *(readily available, understood)*	
	13	Camp standards are met		35	• Spill/Fire/Erosion reporting *(know thresholds, procedure)*	
	14	Site clean-up is appropriate (garbage etc.)			**Document & Record Control**	
				36	• Monitoring/Inspections *(conducted, documented)*	
		EMS		37	• Emergency Response Plan	
		Spill Kits		38	• Contract, License, Permit	
	15	• On site		39	• Plans *(SP, Road layout & design)*	
	16	• Location known		40	• Fire Hazard Assessment completed (i.e. 3 or 6 months)	
	17	• Workers trained in use		41	• Maps *(legible, accurate, available)*	
	18	• Contents maintained		42	• Incident Reports *(documented, submitted to BCTS)*	
		Emergency Response		43	• EFP *(readily available to workers)*	
	19	• ER Plan *(familiar w/ location & responsibilities)*			**Implementation**	
	20	• Tests & Drills *(conducted, documented)*		44	• Workers conforming to EFP's	
	21	• Industrial Waste *(collected and appropriately disposed)*		45	• Fuel Storage *(container, labels, spill control, protection)*	
	22	• Spills, Fires, Erosion Events *(reported & documented)*		46	• Fuel Dispensing *(drip containment, secured)*	
	23	• Refuelling Sites *(appropriate location)*		47	• Fuel Transportation *(secured, labelled if required))*	
	24	• Communication *(means on site – cell, radio, sat)*				

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BC Timber Sales

Environmental Management System

INSPECTION/MONITORING REPORT

Functional Area:
SILVICULTURE

Form:
EMS CHK-006

COMMENT SECTION – Monitoring and Inspections (Include # identifier)

Section E

BCTS
BC Timber Sales

Environmental Management System

INSPECTION/MONITORING REPORT

Functional Area:
SILVICULTURE

Form:
EMS CHK-006

ACTION PLAN/CORRECTIVE ACTION SECTION

	Comments (include # identifier)	Actions	By Who	Due Date
Section F				

Section G

Inspected by (print): ______________________________

Signature: ______________________________

Date of Inspection: ______________________

Received by (print): ______________________________

Signature *X*: ______________________________

(signing does not imply agreement with findings)

Delivery Method:
Email ☐ Fax ☐ Mail ☐ Hand Delivered ☐

BCTS
BC Timber Sales

Environmental Management System
INCIDENT REPORT FORM

Functional Area:
ALL

Form:
EMS CHK-007

INSTRUCTIONS FOR INCIDENTS

Licensee / Permittee / Contractor staff complete the white portions for:

Spills: any concentrated spill greater than the quantity indicated in adjacent table, ***or*** any amount spilled into or immediately adjacent to a stream, lake or running water.

Fires: any natural, man-caused or industrial fire

Erosion events: any emergency situations or potential emergency exists, abnormal movement has or is occurring, abnormal sedimentation, a volume of material greater than 250m^3 has moved or is at imminent risk of movement, or a land area greater than 0.25 ha is disturbed through erosion processes

Trespass or other potential non-compliance: Any action, incident or damage that could result in a penalty or administrative action by MoF Compliance and Enforcement or other regulatory agency.

BCTS staff completes the shaded portions.

** Provincial Emergency Program - 1-800-663-3456*

Reportable Levels

Substances	BCTS	PEP *
Antifreeze	5 litres	5 kilograms
Diesel fuel	25 litres	100 litres
Gasoline (auto & saw)	25 litres	100 litres
Greases	25 litres	100 litres
Hydraulic Oil	25 litres	100 litres
Lubricating Oils	25 litres	100 litres
Methyl Hydrate	5 litres	5 kilograms
Paints & Paint Thinners	25 litres	100 litres
Solvents	25 litres	100 litres
Pesticides	1 kilogram	1 kilogram
Explosives	Any	Any

Section A – Administrative Details

Business Area:	*Field Team:*	*File Number:*	*Project ID (TSL/contract)*	*ORCS/ARCS File #*

Company:	*On-site Contact:*
Description (Block, Road, Major Culvert)	*General Location (operating area)*
Date & Time of Occurence:	*Date reported:*
Discovered by (name):	*Reported by:*

Harvesting ☐ Falling ☐ Cable ☐ Helicopter	☐ Yarding/Loading ☐ Forwarding ☐	***Roads*** ☐ Construction ☐ Maintenance ☐ Deactivation/Rehabilitation	***Major Structures*** ☐ Construction ☐ Maintenance ☐ Deactivation

Weather: Clear ☐ Cloudy☐Heavy rain ☐ Light rain ☐ Snowing☐ **Temp**: Cool ☐ Warm ☐ Hot ☐ **Snow depth**:____cm

Wind: None ☐ Light ☐ Moderate ☐ Heavy ☐

Site conditions: Saturated ☐ Wet ☐ Dry ☐

Other relevant conditions:

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BC Timber Sales

Environmental Management System
INCIDENT REPORT FORM

Functional Area:
ALL

Form:
EMS CHK-007

Section B – Incident/Issue Details

Type of Incident/Issue: ☐Fire ☐Spill ☐Erosion/Landslide event ☐Trespass ☐Significant non-compliance ☐Other

Description of Incident/Issue:

Impact: (size of area affected, impact/damage resulting)

Contributing Factors: (weather, not following procedures/plans, equipment failure, wrong flagging/marking, vandalism)

1.
2.
3.
4.
5.

Was the incident/Issue unavoidable (e.g.: beyond your control, a natural occurrence, or the result of vandalism)? ☐Yes ☐No

Action taken: (equipment used, procedure followed)

Attachment Included: ☐Yes ☐No

Attachment description:

Additional Comments:

Prepared by (LPC or BCTS):

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BC Timber Sales

Environmental Management System
INCIDENT REPORT FORM

Functional Area:
ALL

Form:
EMS CHK-007

Section C – Investigation Details

Name of Investigator:	**Date of Investigation** (mm/dd/yy):

Contributing Factors:

1.
2.
3.
4.
5.

Root Cause:

Recommended Corrective / Preventive Actions:

Reviewed by BCTS staff (name):	**Date** (mm/dd/yy):
EMS non-conformance? ☐Yes ☐No	**Potential non-compliance?** ☐Yes ☐No
EMS Tracking System: (Issue ID number)	**Date Entered** (yy/mm/dd):
Reviewed and Accepted by: (TSM or EMS Committee)	**Date** (yy/mm/dd):

BCTS
BC Timber Sales

Environmental Management System
EMERGENCY RESPONSE TEST/DRILL REPORT FORM

Functional Area: **ALL**

Form: **EMS CHK-008**

Administrative Detail

Business Area:	Name of Company conducting test/drill:	Name of Project (licence, permit, contract):

Project Activity

☐Planning/layout ☐Road construction ☐Harvesting ☐Silviculture ☐Deactivation/Rehabilitation

Location of Test/Drill (operating area, block #, road #)

Participants and Observers

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

Type Conducted

Test: 1) provide emergency scenario, 2) workers verbally respond to the perceived threat through a discussion process, 3) equipment checks

Mock Drill: 1) provide emergency scenario, 2) workers physically respond to the perceived threat by following procedures in an acceptable sequence

☐Test ☐Full Mock Drill ☐Fire ☐Spill ☐Erosion/Landslide event

Additional Comments

Test/Drill Detail

Fire tools complete: ☐Yes ☐No Spill kit complete: ☐Yes ☐No Emergency response plan on site: ☐Yes ☐No

Steps & Sequence (as described verbally or physically enacted)

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Recommendations/Follow up

Results of the Test/Drill

☐ All essential steps for the test or drill were included
☐ The sequence of steps were appropriate for the test or drill
☐ Sufficient emergency equipment was available for response
☐ Communication equipment was available to allow reporting in a timely manner
☐ The Incident Report was completed properly
☐ Participants in the test or drill demonstrated adequate previous training

Person conducting the Test/Drill:

Date conducted (mm/dd/yy):

BCTS representative:

Comments/recommendations:

EMERGENCY FIRE RESPONSE
A Guide to conducting Tests & Drills

Timber Sale/Contract #:	
Licensee/Contractor:	
Date conducted:	
Conducted by:	

DETAILS OF THE DRILL OR TEST

Scope of the Test or Drill

Example Scenario	*Actual Scenario*
Scenario: A worker discovers a small fire (lightning strike) at the edge of cut block that has almost drifted into the standing timber	
How to set up for a test: Explain the scene to the participants and let them give feedback on what response steps should be taken to combat this fire How to set up for a drill: Mark the area that is on "fire" with highly visible flagging tape. Instruct the participants as to the nature of the fire, and allow them to respond	

Suggested steps & sequence

1	**Assess** the hazard and the safety risk	• Evaluate the seriousness of the fire and the potential it has for producing injury or fire damage • ***If there is insufficient training, no S-100 holder, inadequate equipment, or the fire is too large to fight safely, proceed to step 5***
2	**Develop a plan** for initial attack	• The S-100 holder should determine the method of initial attack, equipment, and personnel required
3	**Provide direction/instruction** to the fire fighting crew	• Dispatch personnel to mobilize the equipment • Alert the crew to the potential hazards, and provide any immediate instruction necessary to ensure their safety
4	**Commence initial attack** on the fire	• The S-100 holder will monitor the fire fighting efforts until relieved by a higher authority or another trained suppression worker
5	**Report the fire** to appropriate authorities	• Notify your immediate supervisor • Notify your BCTS representative • Using the *Initial Fire Report Form*, notify the Fire Centre at 1-800-663-5555 and provide information
6	**Complete mop up** with appropriate personnel	• Mop up will be performed under the direction of a qualified supervisor or Ministry of Forests officer
7	**Complete an Incident Report**	• Fill out non-shaded section of EMS CHK-018 Incident Report and give to your BCTS rep for completion

Actual steps & sequence described or performed

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Updated September 09,2005

EMERGENCY FIRE RESPONSE
A Guide to conducting Tests & Drills

EVALUATION OF THE DRILL OR TEST

Test/Drill Participants	

Evaluation Summary

Description	***Yes***	***No***	***Deficiencies/Comments***
All essential steps for the test or drill were included			If not, describe what steps were missed:
The sequence of steps were appropriate for the test or drill			If not, describe what steps were out of sequence:
Sufficient emergency equipment was available for response			If not, list what equipment was missing:
Communication equipment was available to allow reporting in a timely manner			If not, describe what was missing or faulty:
The Incident Report was completed properly			If not, describe the deficiency:
Participants in the test or drill demonstrated adequate previous training			If not, list the training that was lacking:

Did the test/drill demonstrate positive results? Yes ☐ No ☐
(Check the boxes to indicate where improvement can be made)

√	***Opportunities for Improvement***	***Additional Comments***
☐	Participants require further training by the licensee/contractor supervisor or an outside source	
☐	Additional response equipment is required	
☐	Communication capability needs to be upgraded	
☐	Licensee/contractor supervisor needs further training to properly complete forms	
☐	The test/drill should be repeated within a short time to correct the deficiencies	

EMERGENCY LANDSLIDE/EROSION RESPONSE
A Guide to conducting Tests & Drills

Timber Sale/Contract #:	
Licensee/Contractor:	
Date conducted:	
Conducted by:	

DETAILS OF THE DRILL OR TEST

Scope of the Test or Drill	
Example Scenario	***Actual Scenario***
Scenario: A landslide has closed the mainline leading to the worksite. It is late afternoon when the road closure is discovered, and the crew is stranded.	
How to set up for a test: Explain the scene to the participants and let them give feedback on what response steps should be taken to evacuate the crew and ensure safety How to set up for a drill: N/A	

Suggested steps & sequence		
1	**Assess** the hazard and the safety risk	- Evaluate the seriousness of the slide - Warn others in the immediate area and secure the zone from further entry if possible
2	**Develop a plan** of evacuation	- The Supervisor-in-charge will devise a plan to evacuate the crew in a safe manner - Workers will be mustered into a safe zone while awaiting evacuation
3	**Notify First Aid** if there is an injury requiring first aid or medical attention	- Radio or phone for first aid/medical assistance - Provide initial care if a Level 1 attendant is available - Do not allow rescue workers to cross over the slide zone if it is unstable – respond via helicopter access
4	**Report the slide** to the appropriate authorities	- Notify your immediate supervisor - Notify your BCTS representative for further instruction
5	**Take remedial action** as directed by the BCTS rep	- Use heavy equipment to remove the slide or to make an emergency access
7	**Complete an Incident Report**	- Fill out non-shaded section of EMS CHK-018 Incident Report and give to your BCTS rep for completion

Actual steps & sequence described or performed	
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Updated September 09,2005

EMERGENCY LANDSLIDE/EROSION RESPONSE
A Guide to conducting Tests & Drills

EVALUATION OF THE DRILL OR TEST

Test/Drill Participants	

Evaluation Summary			
Description	***Yes***	***No***	***Deficiencies/Comments***
All essential steps for the test or drill were included			If not, describe what steps were missed:
The sequence of steps were appropriate for the test or drill			If not, describe what steps were out of sequence:
Sufficient emergency equipment was available for response			If not, list what equipment was missing:
Communication equipment was available to allow reporting in a timely manner			If not, describe what was missing or faulty:
The Incident Report was completed properly			If not, describe the deficiency:
Participants in the test or drill demonstrated adequate previous training			If not, list the training that was lacking:

Did the test/drill demonstrate positive results? Yes ☐ No ☐
(Check the boxes to indicate where improvement can be made)

√	***Opportunities for Improvement***	***Additional Comments***
☐	Participants require further training by the licensee/contractor supervisor or an outside source	
☐	Additional response equipment is required	
☐	Communication capability needs to be upgraded	
☐	Licensee/contractor supervisor needs further training to properly complete forms	
☐	The test/drill should be repeated within a short time to correct the deficiencies	

EMERGENCY SPILL RESPONSE
A Guide to conducting Tests & Drills

Timber Sale/Contract #:
Licensee/Contractor:
Date conducted:
Conducted by:

DETAILS OF THE DRILL OR TEST

Scope of the Test or Drill

Example Scenario	*Actual Scenario*
Scenario: A piece of heavy equipment parked on the side of the road has leaked oil into a nearby ditch. Arriving on the scene, workers see the oil heading toward a nearby stream.	
How to set up for a test: Explain the scene to the participants and let them give feedback on what response steps should be taken to avoid further contamination. **How to set up for a drill:** Use a pail of water or vegetable oil and dye it black. After explaining the scene, create the spill and let the workers respond accordingly.	

Suggested steps & sequence

1	**Stop** the product flow	• Shut off equipment/nozzles/hydraulic systems • Cap the leak or broken hose • Set the container upright
2	**Alert** your supervisor immediately and warn others in the near vicinity if the spill has created a hazard	• Toxic fumes • Flammable materials creating danger of fire
3	**Contain** the spill by blocking the flow (use spill pads, booms, absorbents, snow, or soil to make a berm)	• Use a shovel to create a soil or snow berm • Use spill pads or booms to create a barrier
4	**Commence recovery** of the spilled material	• *< 25 liters – low risk:* Mop up excess fluids with spill pads or booms and place in container or plastic bag for disposal • *> 25 liters – high-risk:* Do initial mop up with available materials. Contact your BCTS rep for further instructions
5	**Commence cleanup** of the residual material	• *< 25 liters – low risk:* Use "Oil Gator" or similar remediator and mix into soil. Repeat the process to ensure coverage • *> 25 liters – high-risk:* Remove majority of affected soil. Apply remediator and mix thoroughly. Contact your BCTS rep for further instructions for remediation.
6	**Report the Spill** to appropriate personnel	• Low risk spill (< 25L & not in water): report to your immediate supervisor • High risk spill (> 25L or in water): report to supervisor, BCTS rep, & possibly gov't authorities (such as PEP)
7	**Complete an Incident Report**	• Fill out non-shaded section of EMS CHK-018 Incident Report and give to your BCTS rep for completion

Actual steps & sequence described or performed

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Updated September 09,2005

EMERGENCY SPILL RESPONSE
A Guide to conducting Tests & Drills

EVALUATION OF THE DRILL OR TEST

Test/Drill Participants	

Evaluation Summary			
Description	***Yes***	***No***	***Deficiencies/Comments***
All essential steps for the test or drill were included			If not, describe what steps were missed:
The sequence of steps were appropriate for the test or drill			If not, describe what steps were out of sequence:
Sufficient emergency equipment was available for response			If not, list what equipment was missing:
Communication equipment was available to allow reporting in a timely manner			If not, describe what was missing or faulty:
The Incident Report was completed properly			If not, describe the deficiency:
Participants in the test or drill demonstrated adequate previous training			If not, list the training that was lacking:

Did the test/drill demonstrate positive results? Yes ☐ No ☐
(Check the boxes to indicate where improvement can be made)

√	***Opportunities for Improvement***	***Additional Comments***
☐	Participants require further training by the licensee/contractor supervisor or an outside source	
☐	Additional response equipment is required	
☐	Communication capability needs to be upgraded	
☐	Licensee/contractor supervisor needs further training to properly complete forms	
☐	The test/drill should be repeated within a short time to correct the deficiencies	

BC Timber Sales Fuel Management Guide

This Guide contains practices that, when followed, will promote appropriate fuel management. The practices and procedures in this document are supported by:

■ Legislative and Regulatory requirements
  - BC Fire Code
  - Transportation of Dangerous Goods Regulations (TDG)
  - WHMIS (Workplace Hazardous Materials Information System)
  - Motor Vehicle Act

☑ BC Timber Sale EMS requirements
  - Environmental Field Procedures
  - Emergency Response Manual and Plan

☒ Industry recommended practices

≋ General information

SPILL KIT MINIMUM REQUIREMENTS		
In Equipment / Machinery (e.g.: excavators, skidders) • Spill kits must be present in equipment as space permits. • Spill kits must include: ○ one large heavy duty garbage bag or other suitable container ○ 5 absorbent pads appropriate for the type of hazardous material, • protective personal safety gear as required	**Vehicles carrying auxiliary fuel (e.g. Truck box tanks, multiple small containers)** • Spill kits must be present in vehicles transporting and dispensing fuels • Spill kits must include a minimum of: ○ 3 - Heavy duty garbage bags, ○ 8 - absorbent pads appropriate for the type of hazardous material, ○ 2 – 3"x 48"spill booms, ○ absorbent material and/or commercial bioremediation agents, ○ one ABC type fire extinguisher, ○ one shovel ○ A container of Plug-N-Dike is recommended.	**Stationary Fuel Storage & dispensing (tanks or multiple-drum caches)** • Spill kits must be present at points where fuel is dispensed. • Spill kits must include a minimum of: ○ five large heavy duty garbage bags, or one open topped containment drum, ○ 15 absorbent pads appropriate for the type of hazardous material, ○ 4 – 3"x 48"spill booms, ○ 2 - 10ft linkable marine booms (if near marine operations), ○ absorbent material and/or commercial bioremediation agents, ○ 1 – container of Plug-N-Dike, ○ 1 - 20-BC type fire extinguisher, ○ one shovel

BC Timber Sales Fuel Management Guide

SMALL FUEL CONTAINERS (Less than 230 liters)
Drums, Jerry Cans, Pails, Canisters

■ Legal requirement
☑ BCTS requirement
☒ Recommended Practice
☞ Information only

TYPE	CONDITION, DESIGN, & MAINTENANCE	STORING AND SECURING	DISPENSING	TRANSPORT	PREVENTION & RESPONSE
DRUMS	**Condition** ■ Containers must be in good condition – not damaged, rusting, or leaking ☑ Containers must be properly sealed and capped to prevent loss of product **Construction Standard** ■ Containers must be specifically designed for the product ■ Drums must conform to the Canadian General Standards Board (CGSB) specs (the standard has been updated as of Jan 1, 2005) **Inspections** ☑ Regularly inspect containers for leaks or deterioration (conducted by LPC) **Applicable Regulation/Legislation** ☞ TDG Regulation ☞ BC Fire Code ☞ BC Motor Vehicle Regulation	**General requirements** ☞ Storage occurring within an enclosed unit requires additional precautions (see labeling & fire control) ☒ Return empty containers to suppliers or recycling facilities ☒ Older drums should be emptied and exchanged to ensure conformance to new CGSB stds **Securing** ■ Containers must be appropriately secured to prevent shifting, swaying, damage or escape from the vehicle when not in use ■ Tie down straps must have safe combined working load ratings *greater* than the secured load **Labeling** ■ WHMIS labeling or appropriate Product Identification is required when storing hazardous products ■ TDG safety marks (labels or placards) must be visible if containers are stored within an enclosed unit	**General requirements** ■ A pump or self-closing valve is required when dispensing from a drum ■ Do not fill containers beyond their safe filling level *(approximate safe level – 90%)* ☒ Store the hose above the pump to avoid siphoning **Labeling** ■ "No Smoking" signs must be posted at fuel caches where flammable substances (i.e. gasoline) are dispensed **Precautions** ■ Maintain current MSDS in a location available to workers	**Transport** ■ Drums must be properly arranged by: • Stacking in a vertical position • Separating with dunnage • Protecting through use of sides, sideboards, or stakes on the vehicle ■ If multiple containers are carried on the vehicle and the combined capacity exceeds 2000 liters, the following conditions apply: • A shipping document must be completed for the goods hauled • The operator must have a TDG training and possess a certificate • The load must be placarded **Labeling** ■ TDG safety marks are required for the transport of individual drums (any goods over 30 liters in capacity) ☞ Labels are acceptable for individual containers ☞ Placards are required for multiple container loads of 2000 liters or greater and should be attached on all visible sides of the load	**Spill Control and Cleanup** ■ *Initial* spill control measures are required for small containers maintained in storage areas (see *Glossary* for definition) ■ *Additional* spill control measures may be requested in high risk areas for caches (see Glossary) ■ Refer to the ERM and ERP for spill cleanup procedures ■ Maintain a spill kit of suitable size (as per Spill kit minimums) **Fire Control and Response** ■ Smoking is not permitted during dispensing operations ☑ Maintain one BC-rated fire extinguisher of any size for normal dispensing of fuel ■ Maintain one 20-BC or two 10-BC extinguishers where storage is within an enclosed unit (i.e. tool crib, pickup canopy, etc)
JERRY CANS, PAILS, CANISTERS	**Condition & Inspections** ☞ Follow requirements listed above under "Drums" ☒ Replace fatigued containers on a regular basis (plastic containers usually every 5 years) **Construction Standard** ■ Containers must be specifically designed for the product. Use only CSA or ULC approved jerry cans, pails, or canisters ☞ Containers less than 30 liters are exempt from TDG requirements & are governed by Fire Code & WHMIS regulations	**General requirements** ☑ Store all containers to prevent spillage (i.e. in an upright position and tightly capped) **Securing** ■ See requirement under "Drums" **Labeling** ☞ New containers are exempt from *additional* WHMIS label requirements IF contents match the product identifier	☞ See applicable statements under dispensing measures for "DRUMS"	**Transport** ☑ Maintain containers in an upright position and follow securing requirements **Labeling** ☑ See transport measures under "DRUMS" for other requirements	☞ See applicable statements under Prevention and Response Measures for "DRUMS"

BC Timber Sales Fuel Management Guide

INTERMEDIATE FUEL CONTAINERS
Truck Box Fuel Tanks (230 liters – 3000 liters)

■ **Legal requirement**
☑ BCTS requirement
☒ **Recommended Practice**
ℹ **Information**

TYPE	*CONDITION, DESIGN, & MAINTENANCE*	*STORING AND SECURING*	*DISPENSING*	*TRANSPORT*	*PREVENTION & RESPONSE*
SMALL MOBILE TANKS (450 liters or less)	**Tank Condition** ■ Must be filled and capped so that under normal conditions there will be no leakage that would endanger public safety ■ Containers must be in good condition – not damaged, rusting, or leaking **Construction Standard** ■ **Diesel:** a spec or non-spec tank may be used. This tank capacity is exempt from the UN Standard requirements ■ **Gasoline:** a spec tank is required and must be designed and constructed to a design standard specification and must bear a visible and legible safety mark of that standard. ℹ Spec tanks marked with any of the following are acceptable: • UN Standard IBC • CGSB 43.146 • TC 306/406 • ULC/ORD 142.13 (until 2010) **Inspections** ■ Spec tanks carrying gasoline must be inspected by a licensed facility every 60 months (5 yrs) ■ Regularly inspect containers for leaks or deterioration (Licensee/contractor inspections) **Applicable Regulation/Legislation** ℹ TDG Regulation ℹ BC Fire Code ℹ BC Motor Vehicle Regulation	**General requirements** ■ Use a pressure relief cap that meets manufacturers design specifications ℹ Storage occurring within an enclosed unit requires additional precautions (see labeling & fire control) ☑ Where practicable, do not leave vehicles carrying auxiliary fuel unattended in Riparian Management areas ☒ Place a plywood or rubber mat under the tank to prevent wear or damage to the tank **Securing** ■ Containers must be appropriately secured to prevent shifting, swaying, damage or escape from the vehicle when not in use ■ Tie down straps must have safe combined working load ratings *greater* than the secured load **Labeling** ■ WHMIS labeling or appropriate Product Identification is required when storing hazardous products ■ TDG safety marks (labels or placards) must be visible if containers are stored within an enclosed unit	**General requirements** ■ Do not fill containers beyond their safe filling level *(approximate safe level – 90%)* ■ Automatic shut-off nozzles must be used when dispensing fuel ■ Use dispensing pumps designed for the products being handled ☑ Hoses and nozzles must be maintained and not leak ☑ Operators must stay with the nozzle at all times while dispensing fuel ☑ Nozzles must be secured in drip containment after use or placed in an upright position ☑ Do not dispense fuel within a Riparian Management areas where practicable ℹ Self-locking auto nozzles with integral hold open devices are not required ℹ An automatic shut-off nozzle is any spring-loaded device that closes when manual pressure is released **Precautions** ■ Make sure there is suitable bonding between tank and truck box to prevent static charges ■ Maintain current MSDS in a location available to workers	**Transport** ■ If multiple tanks are carried on the vehicle and the combined capacity exceeds 2000 liters, the following conditions apply: • A shipping document must be completed for the goods hauled • The operator must have a TDG training and possess a certificate • The load must be placarded and visible on four sides **Labeling** ■ TDG safety marks (labels or placards may be used) are required for the transport of small mobile tanks ℹ Placards are required for multiple container loads of 2000 liters or greater and should be attached on all visible sides of the load	**Spill Control and Collision Protection** ■ Take precautions to prevent spills ■ *Initial* spill control measures are required for small mobile tanks (see *Glossary* for definition) ■ If tanks contain diesel or gas and are removed from the vehicle and placed on the ground, the following requirements apply: • Collision protection will be provided (see *Glossary*) • *Additional* Spill control measures are required (see *Glossary)* ☑ Refer to the ERM and ERP for spill cleanup procedures ☑ Maintain a spill kit of suitable size (as per Spill kit minimums) **Fire Control and Response** ■ "No Smoking" signs must be in place where flammable products are dispensed (i.e. gasoline) ☑ Maintain one BC-rated fire extinguisher of any size for normal dispensing of fuel ■ Maintain one 20-BC or two 10-BC extinguishers where storage is within an enclosed unit (i.e. tool crib, pickup canopy, etc)

INTERMEDIATE FUEL CONTAINERS
Truck Box Fuel Tanks (230 liters – 3000 liters)

■ Legal requirement
☑ BCTS requirement
☒ Recommended Practice
📚 Information

TYPE	CONDITION, DESIGN, & MAINTENANCE	STORING AND SECURING	DISPENSING	TRANSPORT	PREVENTION & RESPONSE
LARGE MOBILE TANKS (Greater than 450 liters)	**Condition** ■ See requirements under Small Mobile Tanks **Construction Standard** ■ **All Tanks:** must be designed, constructed and/or tested to a design standard specification and must bear a visible and legible safety mark (Spec) or nameplate (Non-Spec) to that standard • **Spec Tanks:** used for diesel and gas and may have any of the following markings: ○ UN Standard IBC ○ CGSB 43.146 ○ TC 306/406 or TC 57 ○ ULC/ORD 142.13 (until 2010) • **Non-Spec Tanks:** containers used for diesel may be used until 2010 if tested at a licensed facility to a design standard **Inspections** ■ Non-spec tanks require annual testing at a licensed facility. ■ Spec tanks must be inspected every 60 months (5 years) at a licensed facility ☑ Regularly inspect containers for leaks or deterioration (Licensee/contractor inspections) **Applicable Regulation/Legislation** 📚 See Small Mobile Tanks	**General requirements** ■ Use a pressure relief cap that meets manufacturers design specifications 📚 Storage occurring within an enclosed unit requires additional precautions (see labeling & fire control) ☑ Where practicable, do not leave vehicles carrying auxiliary fuel unattended in Riparian Management areas ☒ Place a plywood or rubber mat under the tank to prevent wear or damage to the tank **Securing** ■ Containers must be appropriately secured to prevent shifting, swaying, damage or escape from the vehicle when not in use ■ Tie down straps must have safe combined working load ratings *greater* than the secured load **Labeling** ■ WHMIS labeling or appropriate Product Identification is required when storing hazardous products ■ TDG safety marks (labels or placards) must be visible if containers are stored within an enclosed unit	**General requirements** ■ Do not fill containers beyond their safe filling level *(approximate safe level – 90%)* ■ Automatic shut-off nozzles must be used when dispensing fuel ■ Use dispensing pumps designed for the products being handled ☑ Hoses and nozzles must be maintained and not leak ☑ Operators must stay with the nozzle at all times while dispensing fuel ☑ Nozzles must be secured in drip containment after use or placed in an upright position ☑ Do not dispense fuel within a Riparian Management areas where practicable 📚 Self-locking auto nozzles with integral hold open devices are not required 📚 An automatic shut-off nozzle is any spring-loaded device that closes when manual pressure is released **Precautions** ■ Make sure there is suitable bonding between tank and truck box to prevent static charges ■ Maintain current MSDS in a location available to workers	**Transport** ■ If individual or multiple tanks are carried on the vehicle and the capacity exceeds 2000 liters, the following conditions apply: • A shipping document must be completed for the goods hauled • The operator must have a TDG training and possess a certificate • The load must be placarded and visible on four sides **Labeling** ■ TDG placards are required for all tanks over 450 liters in capacity	**Spill Control and Collision Protection** ■ Take precautions to prevent spills ■ *Initial* spill control measures are required for large mobile tanks (see *Glossary* for definition) ■ If tanks contain diesel or gas and are removed from the vehicle and placed on the ground, the following requirements apply: • Collision protection will be provided (see *Glossary*) • *Additional* Spill control measures are required (see *Glossary*) • Breakaway valves will be installed in the fuel hose if the unit is used for dispensing) ☑ Refer to the ERM and ERP for spill cleanup procedures ☑ Maintain a spill kit of suitable size (as per Spill kit minimums) **Fire Control and Response** ■ "No Smoking" signs must be in place where flammable products are dispensed (i.e. gasoline) ☑ Maintain one BC-rated fire extinguisher of any size for normal dispensing of fuel ■ Maintain one 20-BC or two 10-BC extinguishers where storage is within an enclosed unit (i.e. tool crib, pickup canopy, etc)

LARGE FUEL CONTAINERS
Fuel Trucks (Volume > 3000 liters)

■ Legal requirement
☑ BCTS requirement
☒ Recommended Practice
≋ Information

TYPE	CONDITION, DESIGN, & MAINTENANCE	STORING AND SECURING	DISPENSING	TRANSPORT	PREVENTION & RESPONSE
FUEL TRUCKS	**Tank Condition** ■ Must be filled and capped so that under normal conditions there will be no leakage that would endanger public safety ■ Containers must be in good condition – not damaged, rusting, or leaking **Construction Standard** ■ **All Tanks:** must be designed, constructed and/or tested to a design standard specification and must bear a visible and legible safety mark (Spec) to that standard ■ Fuel trucks must meet one of the following standard requirements: • **TC 306/406 – CSA B620-03** ○ Spec tank built after 2003 may transport **Diesel or Gasoline** ○ No sunset date (see inspections below) • CSA B621(requirement 8.4(5)) ○ Spec tanks built before 2003 must only transport **Diesel fuel** ○ The use of these tanks will expire as of 2010 ≋ Non-spec fuel truck tanks may not be used for fuel transport – see transport measures for moving requirements **Inspections – spec or non-spec tanks** ■ Annual external and leak test inspections ■ Periodic internal and pressure test every 60 months ☑ NON-SPEC: The Licensee/Contractor will conduct regular inspections of fuel tanks **Applicable Regulation/Legislation** ≋ TDG Regulation ≋ BC Fire Code ≋ BC Motor Vehicle Regulation	**General requirements** ☑ Where practicable, do not leave vehicles carrying auxiliary fuel unattended in Riparian Management areas **Securing** ■ Fuel truck tanks must be integrally mounted to the unit in accordance with Motor Vehicle standards **Labeling** ■ WHMIS labels (supplier or workplace) are required when storing hazardous products ≋ Product identification is an acceptable substitute for supplier or workplace labels and may be affixed to the sides of the tank compartments and internal piping	**General requirements** ■ Do not fill tanks beyond their safe filling level *(approximate safe level – 90%)* ■ Automatic shut-off nozzles must be used when dispensing fuel ■ Fuel truck dispensing pumps must be designed for the products being handled ■ Nozzles must be retracted on the hose reel and stored in the compartment when not in use ■ Dispensing **diesel** fuel directly from a fuel truck into the equipment is permitted in outdoor locations ☑ Operators must stay with the nozzle at all times while dispensing fuel to avoid overfilling ☑ Hoses and nozzles must be maintained in good repair and not leak ☑ Do not dispense fuel within Riparian Management areas where practicable ≋ Self-locking auto nozzles with integral hold open devices are not required ≋ An automatic shut-off nozzle is any spring-loaded device that closes when manual pressure is released **Precautions** ■ Ensure suitable bonding between tank and truck box to prevent static charges ■ Maintain current MSDS in a location available to workers	**Transport** ■ Fuel trucks used to transport products on public roads must meet Motor Vehicle requirements (i.e. GVW, brakes, lights, axles, etc) ■ When transporting products in fuel trucks, a shipping document and employer TDG training is required ■ When transporting empty TDG tanks, the shipping document must indicate the last contained residue ■ Fuel trucks with tanks not specified or approved for transport of fuel products must be emptied (5% or less) prior to moving on roads used by the public (in accordance with the applicable *Equivalent Level of Safety Permit*) **Labeling** ■ Required labels – product identification (WHMIS) & placards visible on all four sides (TDG)	**Spill Control and Collision Protection** ■ Take precautions to prevent spills ≋ No spill control measures are required for fuel trucks (i.e. tank vehicle) ☑ Refer to the ERM and ERP for spill cleanup procedures ☑ Maintain a spill kit of suitable size to contain fuel spills **Fire Control and Response** ■ "No Smoking" signs must be in place where *flammable products* are dispensed (i.e. gasoline) ■ Maintain one 20-BC or two 10-BC fire extinguishers for fuel trucks

BCTS
BC Timber Sales

BC Timber Sales Fuel Management Guide

LARGE FUEL CONTAINERS
Trailer Tanks and Skid Tanks (Generally > than 3000 liters)

■ Legal requirement
☑ BCTS requirement
☒ Recommended Practice
📚 Information

TYPE	CONDITION, DESIGN, & MAINTENANCE	STORING AND SECURING	DISPENSING	TRANSPORT	PREVENTION & RESPONSE
TRAILER TANKS & SKID TANKS	**Tank Condition** ■ See requirements under Fuel Trucks **Construction Standard** ■ **All TDG Tanks** Must be designed, constructed and/or tested to a design standard spec and must bear a visible and legible safety mark (Spec) or nameplate (Non-Spec) to that standard • **Spec TDG Tanks:** used for diesel & gas. May have any of the following markings: o UN Standard IBC o CGSB 43.146 o TC 306/406 or TC 57 o ULC/ORD 142.13 (until 2010) • **Non-Spec TDG Tanks:** (capacity < 3000 liters) may be used until 2010 if tested at a licensed facility and a nameplate attached ■ **Stationary designed storage tanks** Must be constructed and maintained to conform to a ULC specification for stationary aboveground tanks: • **Spec Stationary Tanks:** used for diesel or gas and will generally have one of the following markings: o ULC-S601 Horizontal tanks o ULC-S630 Vertical tanks o API 12B/12D Bolted/welded • **Non-Spec Stationary Tanks:** must receive approval from the Fire Commissioner's office to be used for storage and dispensing **Inspections** ■ TDG: non-spec tanks require annual testing at a licensed facility. Spec tanks must be inspected every 60 months (5 years) at a licensed facility ☑ Stationary: the Licensee/Contractor will conduct regular inspections	**General requirements** ■ Use a pressure relief cap that meets manufacturers design specifications ☑ Hoses must be stored off the ground when not in use (i.e. retractor, hose reel, hook system) ☑ Where practicable, do not leave vehicles carrying auxiliary fuel unattended in Riparian Management areas ☒ Close and lock valves when the dispensing station will be left unattended for extended periods of time **Securing** ■ Containers must be appropriately secured to prevent shifting, swaying, damage or escape and, ■ Stationary tanks and tanks on trailers must be mounted to a skid or securely mounted in a cradle on a fire-resistant foundation **Labeling** ■ WHMIS labeling or appropriate Product Identification is required when storing hazardous products ■ TDG safety marks (labels or placards) must be visible if containers are stored within an enclosed unit **Applicable Regulation/Legislation** 📚 TDG Regulation 📚 BC Fire Code 📚 BC Motor Vehicle Regulation	**General requirements** ■ Do not fill containers beyond their safe filling level *(approximate safe level – 90%)* ■ Automatic shut-off nozzles must be used when dispensing fuel ■ Use dispensing pumps designed for the products being handled ☑ Hoses and nozzles must be maintained and not leak ☑ Operators must stay with the nozzle at all times while dispensing fuel ☑ Nozzles must be secured in drip containment after use or placed in an upright position ☑ Do not dispense fuel within a Riparian Management areas where practicable 📚 Self-locking auto nozzles with integral hold open devices are not required 📚 An automatic shut-off nozzle is any spring-loaded device that closes when manual pressure is released **Precautions** ■ Make sure there is suitable bonding between tank and truck box to prevent static charges ■ Maintain current MSDS in a location available to workers	**TDG Transport** ■ Trailers used to transport fuel tanks (TDG mobile or Stationary tanks) on public roads must meet Motor Vehicle requirements (i.e. GVW, brakes, lights, axles, etc) ■ **TDG Tanks** with capacities exceeding 2000 liters, the following conditions apply: • A shipping document must be completed for the goods hauled • The operator must have a TDG training and possess a certificate • The load must be placarded on all four sides ■ When transporting empty, the shipping document must indicate the last contained residue **(TDG tanks only)** **Stationary Aboveground Tanks** ☑ **Stationary Aboveground Tanks** not specified or approved for transport of fuel products must: • Be emptied (5% or less) prior to moving on roads used by the public • Be moved only from point to point	**Spill Control and Collision Protection** ■ Take precautions to prevent spills ■ *Initial* spill control measures are required for large tanks (see *Glossary* for definition) ■ When tanks are utilized in a fixed location for fuel dispensing, the following requirements apply: • Collision protection will be provided (see *Glossary*) • *Additional* Spill control measures are required (see *Glossary*) • Breakaway valves will be installed in the fuel hose if the unit is used for dispensing) 📚 Additional valves may be required depending on tank design and risk (i.e. anti-siphon valve, shear valve) ☑ Refer to the ERM and ERP for spill cleanup procedures ☑ Maintain a spill kit of suitable size (as per Spill kit minimums) **Fire Control and Response** ■ "No Smoking" signs must be in place where flammable products are dispensed (i.e. gasoline) ☑ Maintain one BC-rated fire extinguisher of any size for normal dispensing of fuel ■ Maintain one 20-BC or two 10-BC extinguishers where storage is within an enclosed unit (i.e. tool crib, pickup canopy, etc)

FUEL CONTAINERS IN MARINE ENVIRONMENTS

■ Legal requirement
☑ BCTS requirement
☒ Recommended Practice
ℹ Information

TYPE	CONDITION, DESIGN, & MAINTENANCE	STORING AND SECURING	DISPENSING	TRANSPORT	PREVENTION & RESPONSE
SMALL, INTERMEDIATE, AND LARGE CONTAINERS, PERMANENT ABOVEGROUND STORAGE	**Tank Condition** ■ Must be filled and capped so that under normal conditions there will be no leakage that would endanger public safety ■ Containers must be in good condition – not damaged, rusting, or leaking **Construction Standard** ℹ For small containers, see appropriate section ℹ For intermediate and large containers, see appropriate section ℹ For Aboveground permanent facilities, see *BC Fire Code* **Inspections** ■ For legal tank inspection requirements, see "Large Fuel Tanks" ☑ The Licensee/Contractor will conduct regular inspections of fuel tanks and facilities and maintain records ☒ The contractor should maintain records of deliveries to the fueling depot if dips are not maintained **Applicable Regulation/Legislation** ℹ TDG Regulation ℹ BC Fire Code ℹ BC Motor Vehicle Regulation	**General requirements** ■ Storage tanks will not be located closer than 4.5 meters horizontally from the normal high-water mark ■ Solid piping coupled with short suitable lengths of flexible hose must be used between on-shore storage tanks and floating dispensing units ■ Dispensing units must be in a location that will permit safe access by watercraft vessels ☑ Hoses must be stored off the ground when not in use (i.e. retractor, hose reel, hook system) ☒ Close and lock valves when the dispensing station will be left unattended for extended periods of time ℹ An expansion chamber is recommended for storage tanks **Securing** ■ Stationary tanks and tanks on trailers must be mounted to a skid or securely mounted in a cradle on a fire-resistant foundation **Labeling** ■ WHMIS labels (supplier or workplace) are required when storing hazardous products ℹ Product identification is an acceptable substitute for supplier or workplace labels and may be affixed to the sides of the tank compartments and internal piping	**General requirements** ■ Do not fill containers beyond their safe filling level *(approximate safe level – 90%)* ■ Automatic shut-off nozzles must be used when dispensing fuel ■ Dispensing pumps must be designed for the products being handled (i.e. use of water pumps for dispensing fuel is not allowed) ■ Electrically operated solenoid valves (open only during dispensing) and anti-surge valves must be installed in the fuel system ☑ Hoses and nozzles must be maintained in good repair and not leak ☑ Operators must stay with the nozzle at all times while dispensing fuel to avoid overfilling ☑ Nozzles must be secured in drip containment after use or placed in an upright position ☒ Portable tanks should be filled onshore ℹ Self-locking auto nozzles with integral hold open devices are not required ℹ An automatic shut-off nozzle is any spring-loaded device that closes when manual pressure is released **Precautions** ■ Ensure suitable bonding between tank and truck box to prevent static charges ■ Maintain current MSDS in a location available to workers ■ Smoking is not permitted during dispensing operations	**TDG Transport** ■ For TDG tanks, see "Large Fuel Tank" requirements **Stationary Aboveground Tanks** ℹ For aboveground tanks mounted on trailers or skids, see "Large Fuel Tank requirements"	**Spill Control and Collision Protection** ■ Take precautions to prevent spills ■ *Initial* spill control measures are required for large tanks (see *Glossary* for definition) ■ When tanks are utilized in a fixed location for fuel dispensing, the following requirements apply: • Collision protection will be provided (see *Glossary*) • *Additional* Spill control measures are required (see *Glossary*) • Breakaway valves will be installed in the fuel hose if the unit is used for dispensing) ☑ Refer to the ERM and ERP for spill cleanup procedures ☑ Maintain a spill kit of suitable size (as per Spill kit minimums) **Fire Control and Response** ■ "No Smoking" signs must be in place where flammable products are dispensed (i.e. gasoline) ☑ Maintain one BC-rated fire extinguisher of any size for normal dispensing of fuel ■ Post fueling and response procedures at marine dispensing stations

DEFINITION OF TERMS

Term	Explanation
Initial Spill Control Measures	• Spill kits • Locating containers or caches where potential spills would not reach waterways or watercourses or, • A barrier to control the spill from spreading to a waterway or watercourse
Additional Spill Control Measures	• Extra spill kits • Moving the container(s) to a lower risk location • Secondary containment capable of holding 110% of volume (i.e. inside a box or containment area, berms constructed of clay material or a suitable liner) • Double-walled container
WHMIS Labelling & product identification	Hazardous products in the workplace must be identified through one of the following means: • Supplier label • Workplace Label (attached when no supplier label was provided or the supplier label is lost or removed) o Name of the product o Safety precautions o Reference to MSDS • Product Identifier (name of the product, color coding, etc) o Generally used for piping systems o Can be used when workplace labels are impractical
Collision Protection	• A barrier sufficient to alert the operator and prevent accidental damage to the container and release of the product or, • Placement of the container in a location where the potential of collision has been minimized or eliminated
Breakaway valve	An in-line device containing a flutter valve that, upon accidental separation of the hose, will automatically close and prevent fuel from being discharged to ground.

BCTS
BC Timber Sales

MINISTRY OF FORESTS

BC Timber Sales
Environmental Management System

ENVIRONMENTAL OPERATING PROCEDURE

PLANNING

Revised: June 11 2005

EOP - 01

PURPOSE

To define the planning responsibilities related to **cut block layout**, **road layout and design**, and **site plans** to facilitate compliance with legislation and conformance with the EMS.

SCOPE

This environmental operating procedure (EOP) applies to all BA staff involved in the issuance of contracts and inspections of planning activities for cutblocks, roads and site plans. Where BA staff are preparing layout and design or conducting the assessments, responsibilities related to contracting these activities are not applicable.

This EOP also applies to planning contractors required to self-inspect their operations conducted while under contract to BCTS. The contractors' procedures are also described in EFP-02, Project Supervision.

PROCEDURE:	**RESPONSIBILITY**
Planning	
• Review the following as relevant: ▪ FDP/FSP, ▪ SFMP, ▪ Assessments, ▪ statutory decision maker direction / policy, ▪ aerial photographs, ▪ contour maps, ▪ terrain maps, ▪ resource features and management strategies, ▪ guidebooks, ▪ comments received, and ▪ any other relevant information.	Planning Forester
• Determine required assessments, identify critical access / control points, identify approximate road locations, major stream crossings and other contract requirements.	Planning Forester
• Meet with appropriate agency specialists, as necessary, to review and develop project specifications and provisions.	Planning Forester
• Prepare contract documents incorporating all obligations arising from the above.	Planning Forester
• Determine the **risk rating** of the project, considering the environmental risks.	Planning Forester
• Notify stakeholders as required.	Planning Forester
Pre-work Meeting	
• Schedule a pre-work meeting with appropriate BA staff, contractor and relevant agency experts.	Planning Forester, Forest Technicians
• In preparation for pre-work meeting: ▪ collate and review all relevant project documents such as operational plans, contract, field procedures, and maps; and ▪ review the status of all documents and required authorities.	Planning Forester, Forest Technicians

PROCEDURE:	RESPONSIBILITY
Pre-work Meeting (Continued)	
• With BA staff, contractor and appropriate ministry or agency experts review as applicable: ▪ contractor obligations; ▪ contract specifications and deliverables; ▪ field marking and site maps; ▪ stream classifications; ▪ management strategies; ▪ species at risk information; ▪ assessments and expertise; ▪ environmental field procedure(s); ▪ emergency prevention, preparedness and response obligations; ▪ other related EMS responsibilities (e.g. Training Records); and, ▪ special conditions or issues, and operational logistics.	Planning Forester, Forest Technicians
• Where the contractor is required to self-inspect, review the inspection requirements appropriate for the project risk-rating and contract requirements.	Forest Technicians
• Provide or make available copies of relevant documents, checklists and maps to contractor representative.	Forest Technicians
• Walk the site area jointly, if necessary according to the risk rating, to ensure the contractor understands all the issues and requirements.	Forest Technicians
• Complete Planning Prework Form (EMS CHK-001), record discussions and file.	Forest Technicians
Contractor Preworks (see also EFP 02)	
• Review relevant portions of the prework materials with each crew member before they start work. Document the prework discussion; the Planning Prework Form (EMS CHK-001) may be used for this purpose.	Contractor
Contractor Self Inspections (see also EFP-02)	
• Assess conformance with project plan, contract conditions, and EMS requirements	Contractor
• At a frequency determined at the BCTS Prework (may be established by the project risk-rating), conduct an inspection of the work. Document and file the results of the inspection, and provide copies as requested to BCTS. The Planning Inspection/Monitoring Form (EMS CHK-004) may be used for this purpose.	Contractor
• Identify non-conformances and assign corrective and preventive actions.	Contractor
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	Contractor
• Assess need for changes to plans. Obtain appropriate approvals and make required changes.	Contractor
Compliance and Conformance Inspections	
• Conduct project monitoring and inspections at a frequency according to the risk rating of the project. Assess conformance with: ▪ environmental field procedures and other EMS requirements; ▪ applicable legal and other requirements; and, ▪ contract conditions.	Forest Technicians
• Where the Contractor is required to monitor conformance with the EMS and conformance to the operational plan, review their documentation and confirm that ▪ the monitoring/inspection results are accurate ▪ non-conformances are correctly identified, and ▪ corrective/preventive actions are appropriate and completed.	Forest Technicians
• Record inspection results on the Planning Inspection/Monitoring Form (EMS CHK-004). Provide one copy to the contractor, keep one copy, and file one copy in accordance with the EMS record keeping procedures.	Forest Technicians
• Where, in the course of the Contractor's self-inspections or self-monitoring, the Contractor has identified a non-conformance or non-compliance that has or could result in environmental damage, also record the event and any corrective/preventive action assigned by the Contractor on the relevant EMS Inspection/Monitoring Form.	Forest Technicians

PROCEDURE:	**RESPONSIBILITY**
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	Forest Technicians
• Follow up potential non-compliance or non-conformance observations by assigning corrective or preventive actions as appropriate.	Forest Technicians
• Input non-compliance and non-conformance information into the EMS Tracking System.	Forest Technicians
Completion	
• Review submitted information for: ▪ compliance with contract specification; ▪ legislation requirements; ▪ management strategies; and ▪ assessments.	Forest Technicians
• Determine if field review is required, considering proximity to key resource values and complexity and results of Contractor's inspections/monitoring, to ensure all options and contract requirements are considered.	Forest Technicians
• Conduct field review if required to: ▪ confirm boundary locations and markings; ▪ confirm road and landing locations and markings; ▪ assess integrity of data collected; ▪ confirm appropriateness of management strategies; ▪ assess compliance with contract specifications; ▪ assess quality of required assessment information collected; and ▪ confirm the plan adequately reflects the assessment information.	Forest Technicians, EngineerTechnicians
• Complete and file Planning Inspection/Monitoring Form (EMS CHK-004).	Forest Technicians
• Identify outstanding issues requiring resolution.	Forest Technicians
• Advise contractor of any outstanding issues requiring contract resolution.	Forest Technicians
• Confirm and document completion of outstanding issues.	Forest Technicians
• Consider need for Special Use Permits and Foreshore permits for gravel pits, rock quarries, sort yards, log dumps and other uses. Initiate as required.	Forest Technicians
• Confirm cutblock and/or road is approved on FDP/FSP.	Planning Forester
• Obtain MOF approval, as required by legislation (e.g. road design)	Planning Forester
• File completed plan and assessments. Update appropriate tracking systems.	Planning Forester

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RELATED DOCUMENTS

- Planning Pre-Work Form, EMS CHK-001
- Planning Inspection/Monitoring Form, EMS CHK-002

BCTS BC Timber Sales **MINISTRY OF FORESTS**	**BC Timber Sales** **Environmental Management System** **ENVIRONMENTAL OPERATING PROCEDURE** **LICENCEES AND PERMITEES OPERATIONS**
Revised: June 11, 2005	
	EOP - 02

PURPOSE

To define the BA responsibilities related to Licensee and Permitee operations to facilitate compliance with legislation and conformance with the EMS.

SCOPE

This environmental operating procedure (EOP) applies to all BA staff involved in the issuance of authorities, and compliance and conformance inspections of operations. This may include harvesting, road construction, road maintenance, road deactivation/ rehabilitation works, and bridge and major culvert installation, maintenance and removal.

This EOP also describes the responsibilities of licencees / permittees required to self-monitor and self-inspect their operations. The licencees / permittees procedures are also described in EFP-02, Project Supervision.

PROCEDURE:	RESPONSIBILITY
Planning	
• Confirm cutblock and/or road is approved on FDP/FSP.	Forest, Engineer Technicians
Issuance of Authority (Licence and/or Permit)	
• Summarize licensee/permitee obligations from applicable FDP/FSP, cutblock layout and design, site plan, and road layout and design.	Forest, Engineer Technicians
• Prepare license/permit documents incorporating all obligations.	Clerks
• Update project data in EMS Tracking System and other relevant systems to reflect award of licence and/or permit.	Clerks
• Determine the **risk rating** of the project, considering the environmental risks.	Forest, Engineer Technicians, FOS, Contract Officer
• Notify stakeholders as required.	Licensee, Permittee
Pre-work Meeting	
• Schedule a pre-work meeting with appropriate BA staff, licensee/permitee and relevant ministry or agency experts.	Forest, Engineer Technicians
• In preparation for pre-work meeting: ▪ collate and review all relevant project documents such as operational plans, designs, licence, permit, field procedures, and maps; and, ▪ review the status of all documents and required authorities.	Forest, Engineer Technicians
• With BA staff, licensee/permitee and appropriate ministry or agency experts review: ▪ licensee/permitee obligations; ▪ approvals necessary for change to project plan; ▪ licence/permit specifications and deliverables; ▪ site plans and road layout and design; ▪ fish timing windows and measures; ▪ resource features and management strategies; ▪ operation schedule; ▪ field marking and site maps; ▪ emergency prevention, preparedness and response obligations, ERP's, Training records and ▪ special conditions or issues, and operational logistics.	Forest, Engineer Technicians

Environmental Operating Procedure
LICENCEES AND PERMITEES OPERATIONS

PROCEDURE:	RESPONSIBILITY
• Where the licensee/permitee is participating in the EMS, also review: ▪ environmental field procedure(s); and ▪ other EMS requirements as appropriate. Where the licensee/permitee is not currently participating in the EMS, explain the operational EMS requirements and encourage voluntary participation.	Forest, Engineer Technicians
• Where the licensee/permitee is required to self-monitor, self-inspect and/or self-report, review the monitoring / inspection / reporting requirements appropriate for the project risk-rating and License requirements.	Forest, Engineer Technicians
• Provide or make available copies of relevant documents, checklists and maps to licensee/permitee.	Forest, Engineer Technicians
• Walk the site areas, if necessary according to the risk rating, to ensure licensee/permitee understands the requirements.	Forest, Engineer Technicians
• Complete Harvesting and Roads Prework Checklist (EMS CHK – 002), record discussions, provide copy to licensee/permitee, and file.	Forest, Engineer Technicians
• Where applicable, notify licensed water users and the environment official 48 hours before activity begins.	Forest, Engineer Technicians
• Additional pre-works may be required if: • Work has been shutdown for an extended period of time (e.g.: 6 months or seasonal shutdown)	Forest, Engineer Technicians
Licensee / Permitee Self-Inspections (see also EFP 02)	
• Assess conformance with project plan, contract conditions, and relevant emergency preparedness and EMS requirements	Licensee / Permittee
• At a frequency determined at the BCTS Prework (may be established by the project risk-rating), conduct an inspection of the work. Document and file the results of the inspection, and provide copies as requested to BCTS. The Harvesting and Roads Inspection/Monitoring Form (EMS CHK-005) may be used for this purpose.	Licensee / Permittee
• Identify non-conformances and assign corrective and preventive actions.	Licensee / Permittee
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	Licensee / Permittee
• Assess need for changes to plans. Obtain appropriate approvals / amendments and make required changes.	Licensee / Permittee
Compliance and Conformance Inspections (see also EFP 02)	
• Conduct project monitoring and inspections at a frequency according to the risk rating of the project. Assess conformance with: ▪ environmental field procedures, emergency procedures and other EMS requirements; ▪ applicable legal and other requirements (e.g. SFMP); and, ▪ License conditions.	Forest, Engineer Technicians
• Where the Licensee / Permitee is required to monitor conformance with the EMS and conformance to the operational plan, review their documentation and confirm that ▪ the monitoring/inspection results are accurate ▪ non-conformances are correctly identified, and ▪ corrective/preventive actions are appropriate and completed.	Forest, Engineer Technicians
• Record inspection results on the Harvesting and Roads Inspection/Monitoring Form (EMS CHK-005). Provide one copy to the Licensee / Permitee, keep one copy, and file one copy in accordance with the EMS record keeping procedures.	Forest, Engineer Technicians
• Where, in the course of the Licensee / Permitees self-inspections or self-monitoring, the L/P has identified a non-conformance or non-compliance that has or could result in environmental damage, also record the event and any corrective/preventive action assigned by the L/P on the relevant EMS Inspection/Monitoring Form.	Forest, Engineer Technicians
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	Forest, Engineer Technicians
• Follow up potential non-compliance or non-conformance observations by assigning corrective or preventive actions as appropriate.	Forest, Engineer Technicians

PROCEDURE:	RESPONSIBILITY
• Input non-compliance and non-conformance information into the EMS Tracking System.	Forest, Engineer Technicians
Completion	
• Where road, bridge or major culvert design measures have been prepared by a qualified registered professional, attain certification that the work has been carried out in general conformance to the approved design.	Engineer Technicians
• Where bridge or major culvert designs are not required to be designed by a qualified professional, obtain a completion certificate indicating the work is completed in general conformance to the design.	Engineer Technicians
• Where deactivation/rehabilitation prescriptions have been prepared by a qualified registered professional, attain certification that the work has been carried out in general conformance to the approved prescription, if required (e.g.: in unstable terrain).	Forest, Engineer Technicians
• Confirm completion of obligations.	Forest, Engineer Technicians
• Update tracking systems as required.	Forest, Engineer Technicians
• Ensure all records are filed.	Forest, Engineer Technicians

RELATED DOCUMENTS

- Harvesting and Roads Prework Form, EMS CHK – 002
- Harvest and Road Inspection/Monitoring Form, EMS CHK – 005

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MINISTRY OF FORESTS

BC Timber Sales
Environmental Management System

ENVIRONMENTAL OPERATING PROCEDURE

BCTS PROJECTS OPERATIONS

Revised: June 11, 2005

EOP - 03

PURPOSE

To define the responsibilities related to BCTS contract operations (BCTS Projects) to facilitate conformance with the EMS.

SCOPE

This environmental operating procedure (EOP) applies to all BA staff involved in the issuance of contracts, and compliance and conformance inspections of Contractor operations, including projects conducted under contract and/or equipment hire agreements outside of licensee or permitee obligations for:

- road construction, maintenance, inspections and/or deactivation/rehabilitation,
- bridges and major culvert installation, maintenance, inspections and/or removal, and
- Silviculture projects.

This EOP also applies to contractors required to self-monitor and self-inspect their operations conducted while under contract to BCTS. The contractors' procedures are also described in EFP-02, Project Supervision.

PROCEDURE:	**RESPONSIBILITY**
Planning	
• Review the following: ▪ FDP/FSP, ▪ Assessments, ▪ statutory decision maker direction / policy, ▪ aerial photographs, ▪ contour maps, ▪ terrain maps, ▪ resource information / values, ▪ guidebooks, ▪ road and bridge / major culvert inspections and tracking systems, ▪ fish timing windows and measures, ▪ Structure type ▪ Road status (eg: deactivated) ▪ comments received, and ▪ any other relevant information.	Forest, Engineer Technicians
• Determine required assessments, identify critical access / control points, and identify approximate road locations, major stream crossings and other contract requirements.	Forest, Engineer Technicians
• Meet with appropriate agency specialists, as necessary, to review and develop project specifications and provisions.	Forest, Engineer Technicians
• Notify stakeholders as required.	Forest, Engineer Technicians
Contract Award	**RESPONSIBILITY**
• Summarize contractor obligations from applicable FDP/FSP, operational plan, site plan, and road layout and design.	Forest, Engineer Technicians
• Prepare contract documents incorporating all obligations.	Clerks
• Update data in EMS Tracking System and other relevant systems to reflect award of contract.	Forest, Engineer Technicians

PROCEDURE:	RESPONSIBILITY
• Determine the **risk rating** of the project, considering the environmental risks.	Forest, Engineer Technicians
Pre-work Meeting	
• Schedule a pre-work meeting with appropriate BA staff, contractor and relevant ministry or agency experts.	Forest, Engineer Technicians
• In preparation for pre-work meeting: ▪ collate and review all relevant project documents such as operational plans, designs, contract, field procedures, and maps; and, ▪ Review the status of all documents and required authorities.	Forest, Engineer Technicians
• With BA staff, contractor and appropriate ministry or agency experts review as applicable: ▪ contractor obligations; ▪ approvals necessary for change to project plan; ▪ contract specifications and deliverables; ▪ site plans and road layout and design; ▪ fish timing windows and measures; ▪ operation schedule; ▪ field marking and site maps; ▪ environmental field procedure(s); ▪ emergency prevention, preparedness and response obligations; ▪ other related EMS responsibilities (eg. Training Records); and, • special conditions or issues, and operational logistics.	Forest, Engineer Technicians
• Where the contractor is required to self-monitor, self-inspect and/or self-report, review the monitoring / inspection / reporting requirements appropriate for the project risk-rating and contract requirements.	Forest, Engineer Technicians
• Provide or make available copies of relevant documents, checklists and maps to the contractor.	Forest, Engineer Technicians
• Walk the site areas, if necessary according to the risk rating, to ensure the contractor understands the requirements.	Forest, Engineer Technicians
• Complete the relevant prework form: • Harvesting and Roads Prework Form (EMS CHK-002), or • Silviculture Prework Form (EMS CHK-003), Record discussions, provide copy to the contractor, and file.	Forest, Engineer Technicians
• Where applicable, notify licensed water users and the environment official 48 hours before activity begins.	Forest, Engineer Technicians
Contractor Preworks (see also EFP 02)	
• Review relevant portions of the prework materials with each crew member before they start work. Document the prework discussion; the Harvesting and Roads Prework Form (EMS CHK-002) or the Silviculture Prework Form (EMS CHK-003) may be used for this purpose.	Contractor
Contractor Self Inspections (see also EFP 02)	
• Assess conformance with project plan, contract conditions, and EMS requirements	Contractor
• At a frequency determined at the BCTS Prework (may be established by the project risk-rating), conduct an inspection of the work. Document and file the results of the inspection, and provide copies as requested to BCTS. The Harvesting and Roads Inspection/Monitoring Form (EMS CHK-005) or the Silviculture Inspection/Monitoring Form (EMS CHK-006) may be used for this purpose.	Contractor
• Identify non-conformances and assign corrective and preventive actions.	Contractor
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	Contractor

PROCEDURE:	**RESPONSIBILITY**
• Assess need for changes to plans. Obtain appropriate approvals and make required changes.	Contractor
Compliance and Conformance Inspections	
• Conduct project monitoring and inspections at a frequency according to the risk rating of the project. Assess conformance with: ▪ environmental field procedures and other EMS requirements; ▪ applicable legal and other requirements (e.g. SFMP); and, ▪ Contract conditions.	Forest, Engineer Technicians
• Where the Contractor is required to monitor conformance with the EMS and conformance to the operational plan, review their documentation and confirm that ▪ the monitoring/inspection results are accurate ▪ non-conformances are correctly identified, and ▪ corrective/preventive actions are appropriate and completed.	Forest, Engineer Technicians
• Record inspection results on the: ▪ Harvesting and Roads Inspection/Monitoring Form (EMS CHK-005), or the ▪ Silviculture Inspection/Monitoring Form (EMS CHK-006). Provide one copy to the contractor, keep one copy, and file one copy in accordance with the EMS record keeping procedures.	Forest, Engineer Technicians
• Where, in the course of the Contractor's self-inspections or self-monitoring, the Contractor has identified a non-conformance or non-compliance that has or could result in environmental damage, also record the event and any corrective/preventive action assigned by the Contractor on the relevant EMS Inspection/Monitoring Form.	Forest, Engineer Technicians
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	Forest, Engineer Technicians
• Follow up potential non-compliance or non-conformance observations with corrective or preventive actions as appropriate.	Forest, Engineer Technicians
• Input non-compliance and non-conformance information into the EMS Tracking System.	Forest, Engineer Technicians
Completion	
• Where road, bridge or major culvert design measures have been prepared by a qualified registered professional, attain certification that the work has been carried out in general conformance to the approved design.	Engineer Technicians
• Where applicable, obtain a completion certificate from the district specialist for bridge or major culvert designs that are not required to be designed by a qualified professional indicating the work is completed in general conformance to the design.	Engineer Technicians
• Where deactivation/rehabilitation prescriptions have been prepared by a qualified registered professional, attain certification that the work has been carried out in general conformance to the approved prescription, if required (e.g.: in unstable terrain).	Forest, Engineer Technicians
• Confirm completion of obligations.	Forest, Engineer Technicians
• Update tracking systems as required.	Forest, Engineer Technicians
• Ensure all records are filed.	Forest, Engineer Technicians

RELATED DOCUMENTS

- Harvesting and Roads Prework Form, EMS CHK – 002
- Silviculture Prework Checklist, EMS CHK – 003
- Harvest and Road Inspection/Monitoring Form, EMS CHK – 005
- Silviculture Inspection/Monitoring Form, EMS CHK – 006
- Incident Reporting and Investigation EOP 06

MINISTRY OF FORESTS

BC Timber Sales
Environmental Management System

ENVIRONMENTAL OPERATING PROCEDURE

LWCP PLANNING

Revised: January 31 2005

EOP - 04

PURPOSE

To define procedures for Licencees with Cutting Permits (LWCP) project planning to facilitate compliance with legislation and conformance with the EMS

SCOPE

This environmental operating procedure (EOP) applies to BCTS staff involved in the planning, supervision and monitoring for layout of cut blocks, road layout and design, and site plans carried out for an LWCP or equivalent licence issued by the BCTS.

This EOP also describes the responsibilities of LWCPs. However, the LWCPs Project Monitoring requirements described in this EOP do not apply to licences and/or associated permits that do not contain mandatory EMS requirements.

PROCEDURE:	**RESPONSIBILITY**	
Planning		
• Review the following: • current FDP/FSP, • assessments, • agency policy, • aerial photographs, • guidebooks, • comments received, • forest cover, • contour and terrain maps, • known resource information/values, • statutory decision maker direction/policy, and • any other relevant information.	LWCP	Planning Forester
• Determine block(s) and road(s) approval status on FDP/FSP.	LWCP	Planning Forester
• Complete a review of the need for any roads, considering economic feasibility and placement.	LWCP	Planning Forester
• Identify approximate road locations, critical access / control points, major stream crossings, and initial strategies to address resource issues. Determine required assessments.	LWCP	Planning Forester
• If forest health is at risk, expedite cutblock layout and site plan preparation for BCTS review.	LWCP	Planning Forester
• Consult with stakeholders, as required. Record and maintain records of discussions and resolutions.	LWCP	Planning Forester
• Where necessary, prepare and award contract incorporating all obligations.	LWCP	Planning Forester, Forest Technicians

Environmental Operating Procedure
LWCP PLANNING

PROCEDURE:	RESPONSIBILITY	
Pre-work Meeting		
• Prior to commencement of activities schedule a pre-work meeting with appropriate staff, BCTS staff, and/or contractor including relevant specialists, as necessary.	LWCP	Planning Forester, Forest Technicians
• In preparation for pre-work meeting: ▪ Collate and review all relevant project documents such as operational plans, designs, contract specifications, work instructions, and maps.	LWCP	Planning Forester, Forest Technicians
• With staff, BCTS staff and/or contractor and appropriate specialists review: ▪ Relevant project documents such as operational plans, designs, contract specifications, work instructions, field marking standards and maps. ▪ Management strategies. ▪ All known information and outstanding information to be collected. ▪ Schedules and operational logistics. ▪ Monitoring and inspection requirements. ▪ Discuss assessment needs, confirm contractor expertise to deliver or have assessments prepared by secondary qualified specialist as required.	LWCP	Forest Technicians
• Where the LWCP has volunteered to participate or is required to participate in the EMS, also review: ▪ environmental field procedure(s); and ▪ ERP's and other EMS requirements as appropriate. (eg. Training Records) Where the licencee/permitee is not required to participate in the EMS, explain the operational EMS requirements and encourage voluntary participation.	LWCP	Planning Forester
• Provide or make available copies of relevant documents and maps to staff or contractor.	LWCP	Forest Technicians
• Walk the site jointly, as required, to ensure staff or contractor understands all the issues and requirements.	LWCP	Forest Technicians
• Ensure staff or contractor has the current EMS environmental field procedures and understands their responsibilities, including emergency prevention, preparedness and response obligations.	LWCP	Forest Technicians
• Complete Planning Prework Form (EMS CHK-001), record discussions and file.	LWCP	Forest Technicians
LWCP Self-Inspection		
• Assess conformance with project plan and contract conditions (if contracted) at a frequency appropriate for the project risk. Where the LWCP has volunteered to participate or is required to participate in the EMS, complete the Planning Inspection/Monitoring Form (EMS CHK-004) and provide copies as requested to BCTS, and file.	LWCP	
• Identify non-conformances and assign corrective and preventive actions.	LWCP	
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	LWCP	
• Before submittal to BCTS, review the plan for: ▪ compliance with contract specification (if contracted); ▪ legislation requirements; ▪ management strategies; and ▪ assessments.	LWCP	
Completion		
• Review submitted information for: ▪ legislation requirements; ▪ management strategies; and ▪ maps, reports and assessments.	BCTS	Forest Technicians
• Determine if field review is required, considering proximity to key resource values and complexity, to ensure all options are considered.	BCTS	Forest Technicians

Environmental Operating Procedure
LWCP PLANNING

PROCEDURE:	RESPONSIBILITY	
• Conduct field review if required to: ▪ confirm boundary locations and markings; ▪ confirm road and landing locations and markings; ▪ assess integrity of data collected; ▪ confirm appropriateness of management strategies; ▪ assess quality of required assessment information collected; and ▪ confirm the plan adequately reflects the assessment information.	BCTS	Forest Technicians
• Identify outstanding issues requiring resolution.	BCTS	Forest Technicians
• Complete and file the Planning Inspection/Monitoring Form (EMS CHK – 004).	BCTS	Forest Technicians
• Provide copy of the completed form to LWCP staff for resolution of identified issues.	BCTS	Planning Forester
• Confirm and document completion of outstanding issues.	BCTS	Planning Forester
• Consider need for Special Use Permits and Foreshore permits for gravel pits, rock quarries, sort yards, log dumps and other uses. Initiate as required.	LWCP	Planning Forester
• Confirm cutblock and/or road is approved on FDP/FSP.	LWCP	Planning Forester
• Obtain MOF approval, as required by legislation.	LWCP	Planning Forester
• File final maps, reports, and assessments. Update information in appropriate tracking system(s).	BCTS	Planning Forester

RELATED DOCUMENTS

- Planning Prework Form, EMS CHK-001
- Planning Inspection/Monitoring Form, EMS CHK-004

BCTS
BC Timber Sales

MINISTRY OF FORESTS

BC Timber Sales
Environmental Management System

ENVIRONMENTAL OPERATING PROCEDURE

LWCP OPERATIONS

Revised: June 11, 2005

EOP - 05

PURPOSE

To define procedures related to LWCP operations to facilitate compliance with legislation and conformance with the EMS.

SCOPE

This environmental operating procedure (EOP) applies to all BCTS staff involved in supervising and monitoring of LWCP operations. This may include harvesting, road construction, road maintenance works, inspections, road deactivation/ rehabilitation works and bridge and major culvert installation, maintenance, inspections and removal. All operations under the authority of a licence and/or associated permit are included.

This EOP also describes the responsibilities of LWCP's. However, the LWCP's Project Monitoring requirements described in this EOP do not apply to licences and/or associated permits that do not contain mandatory EMS requirements.

PROCEDURE:	RESPONSIBILITY	
Award		
• Obtain Authority (licence or permit).	LWCP	Forest Technicians
• Obtain copies of authority and site plans from Operational Planning, and update the appropriate tracking system(s).	BCTS	Forest Technicians
• Determine the **risk rating** of the project using the risk rating form, considering the environmental risks.	BCTS	Forest Technicians
Pre-work Meeting		
• Schedule a pre-work meeting with appropriate staff, BCTS staff and relevant ministry or agency experts.	LWCP	Forest Technicians
• In preparation for pre-work meeting: ▪ collate and review all relevant project documents such as operational plans, designs, licence, permit, field procedures, and maps; and, • review the status of all documents and required authorities.	LWCP	Forest Technicians
• With staff, contractors and BCTS staff (if required), ministry or agency experts review: ▪ licence/permit obligations; ▪ approvals necessary for change to project plan; ▪ licence/permit specifications and deliverables; ▪ site plans and road layout and design; ▪ fish timing windows and measures; ▪ resource features and management strategies; ▪ operation schedule; ▪ field marking and site maps; ▪ emergency prevention, preparedness and response obligations, ERP's, training records; and • special conditions or issues, and operational logistics.	LWCP	Forest Technicians

PROCEDURE:	RESPONSIBILITY	
• Where the LWCP is participating in the EMS, also review: ▪ environmental field procedure(s); and ▪ other EMS requirements as appropriate. Where the LWCP is not currently participating in the EMS, explain the operational EMS requirements and encourage voluntary participation.	LWCP	Forest Technicians
• Provide or make available copies of relevant documents, checklists and maps to staff and contractors.	LWCP	Forest Technicians
• Walk the site areas, as necessary, to ensure staff, contractors and BCTS staff (if required) understand the requirements.	LWCP	Forest Technicians
Complete the Harvesting and Roads Prework Form (EMS CHK-002), record discussions, provide copy to BCTS, and file.	LWCP	Forest Technicians
• Where applicable, notify licensed water users and the environment official 48 hours before activity begins.	LWCP	
LWCP Self-Inspections		
• At a frequency determined at the BCTS Prework (may be established by the project risk-rating), conduct an inspection of the work. Where the LWCP has volunteered to participate or is required to participate in the EMS, complete the Harvesting and Roads Inspection/Monitoring Form (EMS CHK-005) and provide copies as requested to BCTS, and file.	LWCP	
• Identify non-conformances and assign corrective and preventive actions.	LWCP	
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	LWCP	
• Assess need for changes to plans. Obtain appropriate approvals / amendments and make required changes.	LWCP	
Compliance and Conformance Inspections		
• Conduct project monitoring and inspections at a frequency according to the risk rating of the project. Assess conformance with: ▪ environmental field procedures, emergency procedures and other EMS requirements; ▪ applicable legal and other requirements; and, • License conditions.	BCTS	Forest Technicians
• Where the LWCP is required to monitor conformance with the EMS and conformance to the operational plan, review their documentation and confirm that ▪ the monitoring/inspection results are accurate ▪ non-conformances are correctly identified, and ▪ corrective/preventive actions are appropriate and completed.	BCTS	Forest Technicians
• Record inspection results on the Harvesting and Roads Inspection/Monitoring Form (EMS CHK-005). Provide one copy to the LWCP, keep one copy, and file one copy in accordance with the EMS record keeping procedures.	BCTS	Forest Technicians
• Follow up on non-conformance identified during previous assessments to determine if corrective and preventive action has been carried out.	BCTS	Forest Technicians
• Follow up potential non-compliance or non-conformance observations by assigning corrective or preventive actions as appropriate.	BCTS	Forest Technicians
• Input non-compliance and non-conformance information into the EMS Tracking System.	BCTS	Forest Technicians
Completion		
• Where road, bridge or major culvert design measures have been prepared by a qualified registered professional, attain certification that the work has been carried out in general conformance to the approved design.	LWCP	Engineer Technicians
• Where bridge or major culvert designs are not required to be designed by a qualified professional, obtain a completion certificate indicating the work is completed in general conformance to the design.	LWCP	Engineer Technicians

PROCEDURE:	RESPONSIBILITY	
• Where deactivation/rehabilitation prescriptions have been prepared by a qualified registered professional, attain certification that the work has been carried out in general conformance to the approved prescription, if required (e.g.: in unstable terrain).	LWCP	
• Assess conformance with and completion of EMS / EOP requirements. The Conformance with EOP Checklist supplement may be used for this purpose.	LWCP	Forest Technicians
• Confirm completion of obligations.	BCTS	Forest Technicians
• Update tracking systems as required.	BCTS	Forest Technicians
• Ensure all records are filed.	BCTS	Forest Technicians

RELATED DOCUMENTS

- Harvesting and Roads Prework Form, EMS CHK – 002
- Harvest and Road Inspection/Monitoring Form, EMS CHK – 005
- Conformance with EOP Checklist supplement document
- Incident Reporting and Investigation EOP-06

BCTS
BC Timber Sales

MINISTRY OF FORESTS

BC Timber Sales
Environmental Management System

ENVIRONMENTAL OPERATING PROCEDURE

INCIDENT REPORTING AND INVESTIGATION

Revised: June 11, 2005

EOP - 06

PURPOSE

To define procedures related to harvesting operations to facilitate compliance with legislation and environmental objectives and targets.

SCOPE

This environmental operating procedure (EOP) applies to all BA staff involved in supervising and monitoring of LWCP, Licensee, Permittee, and/or Contractor operations. This may include harvesting, Silviculture, road construction, road maintenance works, road deactivation/ rehabilitation works and bridge and major culvert installation, maintenance and removal.

PROCEDURE:	RESPONSIBILITY
▪ Review and follow-up any Incident Report Form (EMS CHK-007) that has been submitted to you for an incident as defined in the ERM and on the Incident Report Form (EMS CHK-007).	CSO
▪ If the reported incident is a spill, ensure the reporting Licensee / Permittee / Contractor or BCTS staff member has followed the requirements of the ERP to contain the spill and initiate clean-up where possible. Determine if there is any threat of the spilled material entering water bodies or other sensitive areas, and advise them to contact the Ministry of Water, Land and Air Protection or other agencies accordingly.	Forest, Engineer Technicians
▪ Ensure that notification of external agencies or other parties occurs as required.	Forest, Engineer Technicians
▪ Provide a first copy of the Incident Report to your immediate supervisor within 24 hours of the incident. The report should be as complete as possible with any information known at the time of the incident.	Forest, Engineer Technicians
▪ Enter initial information about the incident into the EMS tracking system.	Forest, Engineer Technicians
▪ Determine if further investigation is necessary to determine the root cause of the incident, including but not limited to an assessment of: ▪ adequacy of preventive measures, including training, procedures, guidance, or instructions ▪ adequacy of response measures, including training, equipment capabilities, procedures, etc. ▪ LWCP, Licensee, Permittee, Contractor and company conformance to procedures or instructions ▪ control of impact, including timeliness of response ▪ compounding factors, etc.	Forest, Engineer Technicians, and CSO
▪ Develop recommendations for corrective / preventive actions and an appropriate action plan that addresses: ▪ immediate action to address impacts ▪ action to address root cause(s) ▪ responsibility, timeline, and verification of completion of the various actions, as tracked in the EMS tracking system	Forest, Engineer Technicians, and CSO
▪ Complete subsequent copies of the Incident Report Form (EMS CHK-007) or other documents and submit them to the Timber Sales Manager or his designate for review until approval of a final Incident Report is obtained.	Forest, Engineer Technicians
Enter final Incident Report data into the EMS tracking system	Forest, Engineer Technicians

RELATED DOCUMENTS

- Incident Report Form, EMS CHK-007

BC Ministry of Forests **BCTS** Babine Business Area	**"How to EMS" Guidance for:** **Licencee / Permittee Harvesting and Roads Operations**

1. Definitions:

Environmental Aspect: the environmental concern(s) related to the task you are conducting (e.g.: *boundaries* during falling; *water quality* during road crossing installation)

Significant Environmental Aspect: the most important environmental aspects for the task you are conducting; for most licencee / permittee operations, the significant environmental aspects are:

- Alter or influence riparian areas / water quality
- Alter or influence natural drainage patterns
- Alter or influence fish habitat
- Fire prevention /fire control
- Alter or influence wildlife or species at risk habitat
- Alter or influence soil /terrain stability
- Fuel/oil/chemical or waste handling

Environmental Impact: what can happen if the environmental aspect is not properly managed (e.g.: reduced site productivity; damage to fish habitat)

Operational Control: the measures that are in place to manage the aspects and prevent the impact from occurring or spreading. Responsibility for implementing the operational controls, and precisely how the controls should be used, is clearly described in the EMS. The primary operational controls are:

- pre-works, to ensure everyone knows about the aspects and the controls that should be in place;
- inspections, to make sure that the work is proceeding according to plan;
- environmental field procedures (EFPs), to guide field activity and avoid impacts;
- environmental operating procedures (EOPs), to guide project management activity; and
- emergency preparedness and response manual (EPRM) and the Emergency Response Plan (ERP), in the event of an environmental emergency (fire, spill or slide).

Form: a checklist to be completed during a task to ensure that all relevant items are covered, and to provide a record of the completion and results of the task

2. EMS Training Requirements for BCTS staff, Licencees, Permitees, and Contractors (LPCs)

- General awareness of the environmental policy, the EMS, and the EMS requirements
- Knowledge of EFPs relevant to the task(s) they are doing
- Knowledge of EOPs relevant to the task(s) they are doing (BCTS staff and LPC supervisors only)
- Knowledge of the EPRM if the project has a risk of fire, spill and/or slide
- Any other training or certification required by law (e.g.: pesticide handling certificate; WHMIS training, TDG training, S100 fire-fighting training, blasting certificate, etc.)

Keep records that identify who were trained, what they were trained in, and when they were trained. Use Training summary form. If training is not current, submit a training plan to BCTS that shows when the required training will be delivered.

3. During Normal Operations

Task:	Relevant Procedures:	Relevant Forms / Records:
a) Have a pre-work with BCTS before beginning	EFP 2 - Project Supervision	CHK-002

b)	Conduct a pre-work with every crew member and subcontractor before they begin work	EFP 2 - Project Supervision	CHK-002 Keep a record of the name of every crewmember and subcontractor that you have given a pre-work to.
c)	Conduct work in accordance with field procedures	EFP 1 - General EFP 2 - Project Supervision EFP 4 – Roads, Bridges, and Culverts EFP 5 - Harvesting EFP 6 - Fuel Handling	n/a
d)	Monitor the work and conformance to the EMS	EOP 3 - BCTS Projects	Harvesting & Roads Inspection Report (CHK-005)

4. To Prepare for and Respond to an Emergency Event (Landslide, Spill or Fire)

Task:		**Relevant Procedures:**	**Relevant Forms:**
a)	Review emergency response procedures with crew and subcontractors	Emergency Preparedness and Response Plan and ERP	Training summary form
b)	Conduct tests of the procedures as required	ERP	Record of Emergency Response Test (CHK-008)
c)	Respond to workers reports of an emergency event	Emergency Preparedness and Response Plan and ERP	n/a
d)	Investigate and report the incident to BCTS and externally if required	Emergency Preparedness and Response Plan and ERP	Incident Report form (CHK-007)

BC Ministry of Forests	"How to EMS" Guidance for:
BCTS Babine Business Area	**Contractor** **Planning Contracts** **(Block, Road Layout, SPs)**

1. Definitions:

Environmental Aspect: the environmental concern(s) related to the task you are conducting (e.g.: *boundaries* during layout; *inadequate assessment* for riparian areas)

Significant Environmental Aspect: the most important environmental aspects for the task you are conducting; for most licencee / permittee operations, the significant environmental aspects are:

- Alter or influence riparian areas /water quality
- Alter or influence natural drainage patterns
- Alter or influence fish habitat
- Alter or influence wildlife or species at risk habiat
- Alter or influence soil /terrain stability

Environmental Impact: what can happen if the environmental aspect is not properly managed (e.g.: damage to environmental feature; trespass; landslide)

Operational Control: the measures that are in place to manage the aspects and prevent the impact from occurring or spreading. Responsibility for implementing the operational controls, and precisely how the controls should be used, is clearly described in the EMS. The primary operational controls are:

- pre-works, to ensure everyone knows about the aspects and the controls that should be in place;
- inspections, to make sure that the work is proceeding according to plan;
- environmental field procedures (EFPs), to guide field activity and avoid impacts;
- environmental operating procedures (EOPs), to guide project management activity; and
- emergency preparedness and response manual (EPRM) and the Emergency Response Plan (ERP), in the event of an environmental emergency (fire, spill or slide).

Form: a checklist to be completed during a task to ensure that all relevant items are covered, and to provide a record of the completion and results of the task

2. EMS Training Requirements for BCTS staff, Licencees, Permitees, and Contractors (LPCs)

- General awareness of the environmental policy, the EMS, and the EMS requirements
- Knowledge of EFPs relevant to the task(s) they are doing
- Knowledge of EOPs relevant to the task(s) they are doing (BCTS staff and LPC supervisors only)
- Knowledge of the EPRM if the project has a risk of fire, spill and/or slide
- Any other training or certification required by law (e.g.: pesticide handling certificate; WHMIS training, TDG training, S100 fire-fighting training, blasting certificate, etc.)

Keep records that identify who was trained, what they were trained in, and when they were trained Use Training summary form. If training is not current, submit a training plan to BCTS that shows when the required training will be delivered.

3. During Normal Operations

Task:	**Relevant Procedures:**	**Relevant Forms / Records:**
a) Have a pre-work with BCTS before beginning	EFP 2 - Project Supervision	CHK-001
b) Conduct a pre-work with every crew member and subcontractor before they begin work	EFP 2 - Project Supervision	CHK-001 Keep a record of the name of every crewmember and subcontractor that you have given a pre-work to.

c)	Conduct work in accordance with field procedures	EFP 1 - General EFP 2 - Project Supervision EFP 3 - Planning and Assessments	n/a
d)	Monitor the work and conformance to the EMS	EOP 1 - Planning	EMS Conformance Checklist (EMS CHK-004) Development / Planning Inspection Checklist (EMS CHK-004)

4. To Prepare for and Respond to an Emergency Event (Landslide, Spill or Fire)

***Note:* These emergency procedures only apply if BCTS has determined the project risk rating warrants emergency preparedness, as instructed during the pre-work.**

	Task:	**Relevant Procedures:**	**Relevant Forms:**
a)	Review emergency response procedures with crew and subcontractors	Emergency Preparedness and Response Plan and ERP	Training summary form
b)	Conduct tests of the procedures as required	ERP	Emergency Response Test/Drill Report Form (EMS CHK-008)
c)	Respond to workers reports of an emergency event	Emergency Preparedness and Response Plan and ERP	n/a
d)	Investigate and report the incident to BCTS and externally if required	Emergency Preparedness and Response Plan and ERP	Incident Report form (EMS CHK-007)

BC Ministry of Forests **BCTS** Babine Business Area	**"How to EMS" Guidance for:** **Contractor Silviculture Contracts**

1. Definitions:

Environmental Aspect: the environmental concern(s) related to the task you are conducting (e.g.: *soil disturbance* during mechanical site prep; *fire* during prescribed burning)

Significant Environmental Aspect: the most important environmental aspects for the task you are conducting; for silviculture, the significant environmental aspects are:

- Fire prevention /fire control (during prescribed burning.)
- Fuel/oil/chemical/or waste handling (if handling diesel or gasoline onsite.)
- Alter or influence natural drainage patterns (during mechanical site prep)

Environmental Impact: what can happen if the environmental aspect is not properly managed (e.g.: reduced site productivity; negative human health effects)

Operational Control: the measures that are in place to manage the aspects and prevent the impact from occurring or spreading. Responsibility for implementing the operational controls, and precisely how the controls should be used, is clearly described in the EMS. The primary operational controls are:

- pre-works, to ensure everyone knows about the aspects and the controls that should be in place;
- inspections, to make sure that the work is proceeding according to plan;
- environmental field procedures (EFPs), to guide field activity and avoid impacts;
- environmental operating procedures (EOPs), to guide project management activity; and
- emergency preparedness and response manual (EPRM) and the Emergency Response Plan (ERP), in the event of an environmental emergency (fire, spill or slide).

Form: A checklist to be completed during a task to ensure that all relevant items are covered, and to provide a record of the completion and results of the task

2. EMS Training Requirements for BCTS staff, Licencees, Permitees, and Contractors (LPCs)

- General awareness of the environmental policy, the EMS, and the EMS requirements
- Knowledge of EFPs relevant to the task(s) they are doing
- Knowledge of EOPs relevant to the task(s) they are doing (BCTS staff and LPC supervisors only)
- Knowledge of the EPRM if the project has a risk of fire, spill and/or slide
- Any other training or certification required by law (e.g.: pesticide handling certificate; WHMIS training, TDG training, S100 fire-fighting training, blasting certificate, etc.)

Keep records that identify who were trained, what they were trained in, and when they were trained. Use Training Summary Form. If training is not current, submit a training plan to BCTS that shows when the required training will be delivered.

3. During Normal Operations

Task:	**Relevant Procedures:**	**Relevant Forms / Records:**
a) Have a pre-work with BCTS before beginning	EFP 2 - Project Supervision	CHK-003
b) Conduct a pre-work with every crewmember and subcontractor before they begin work. New staff =new pre-work. One per block for herbicides.	EFP 2 - Project Supervision	CHK-003 Keep a record of the name of every crewmember and subcontractor that you have given a pre-work to.
c) Conduct work in accordance with field procedures	EFP 1 - General EFP 2 - Project Supervision EFP 6 - Fuel Handling	N/A

d)	Monitor the work and conformance to the EMS. One per block generally and reviewed and initialled by adminner	EOP 3 - BCTS Projects	Silviculture Inspection Report (CHK-006)

4. To Prepare for and Respond to an Emergency Event (Landslide, Spill or Fire)

Note: These emergency procedures only apply if BCTS has determined the project risk rating warrants emergency preparedness, as instructed during the pre-work.

	Task:	**Relevant Procedures:**	**Relevant Forms:**
a)	Review emergency response procedures with crew and subcontractors	Emergency Preparedness and Response Plan and ERP	Training summary form
b)	Conduct tests of the procedures as required	ERP	Emergency Response Test/Drill Report Form (CHK-008)
c)	Respond to workers reports of an emergency event	Emergency Preparedness and Response Plan and ERP	n/a
d)	Investigate and report the incident to BCTS and externally if required	Emergency Preparedness and Response Plan and ERP	Incident Report form (CHK-007)

WILDFIRE REGULATION

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PART 1- INTERPRETATION

Definitions

1 (1) In this regulation:

"Act" means the *Wildfire Act*;

"Buildup Index" has the same meaning as under the Canadian Forest Service's publication, the Canadian Forest Fire Weather Index System, as amended from time to time;

"category 1 open fire" means an open fire that burns piled material no larger than 1m in height and 1 m in diameter and includes a campfire that burns such material;

"category 2 open fire" means an open fire that

(a) burns material in one pile not exceeding 2 m in height and 3 m in width,

(b) burns material concurrently in 2 piles each not exceeding 2 m in height and 3 m in width, or

(c) burns stubble or grass over an area that does not exceed 0.2 ha;

"category 3 open fire" means an open fire that burns

(a) material concurrently in 3 or more piles each not exceeding 2 m height and 3 m in width,

(b) material in one or more piles each exceeding 2 m in height or 3 m in width,

(c) one or more windrows, or

(d) stubble over an area exceeding 0.2 ha;

"direct fire control cost" means a cost of the government for fire control activities that is recoverable under section 25 (1) (a) or 27 (1) (b) of the Act;

"engine" means an internal combustion engine but does not include

(a) an engine on or in a water craft that is in the water,

(b) an engine in or on a vehicle primarily used for the transportation of people, or

(c) an engine in an aircraft;

"Fire Danger Class" means the Fire Danger Class as determined in section 6 (2);

"fire suppression system" means a system that is used for the purpose of suppressing a fire and is appropriate for the type of fire, including

(a) a water delivery system,

(b) a suppressant or surfactant delivery system, or

(c) a fire extinguisher;

"Fire Weather Index" has the same meaning as under the Canadian Forest Service's publication, the Canadian Forest Fire Weather Index System, as amended from time to time;

"fuel break" means

(a) a barrier or a change in fuel type or condition, or

(b) a strip of land that has been modified or cleared

to prevent fire spread;

"fuel hazard" means the potential fire behaviour, without regard to the state of weather or topography, based on the physical fuel characteristics, including fuel arrangement, fuel load, condition of herbaceous vegetation and the presence of ladder fuel;

"harvest" has the same meaning as under section 1 (1) of the Forest Planning and Practices Regulation B.C. Reg.14/2004;

"heavy equipment" means crawler tractors, skidders, excavators or other suitable mechanized fire-fighting equipment;

"high risk activity" means each of the following:

(a) mechanical brushing;

(b) disk trenching;

(c) preparation or use of explosives;

(d) using fire- or spark-producing tools, including cutting tools;

(e) using or preparing fireworks or pyrotechnics;

(f) grinding, including rail grinding;

(g) mechanical land clearing;

(h) log forwarding;

(i) skidding logs;

(j) yarding logs using cable, helicopter and lighter than air vehicle systems;

(k) using a vehicle with metal tracks, chains or studs;

(l) operating a power saw;

(m) clearing or maintaining right of ways, including grass mowing;

(n) rock drilling;

(o) tree processing, including de-limbing;

(p) welding;

(q) portable wood chipping, milling, processing or manufacturing;

"mining operation" means the operation and maintenance of a mine and includes any land clearing or construction of a mine;

"protected area" means

(a) a

(i) park, or

(ii) recreation area

as defined in section 1 of the *Park Act*,

(b) an area established under the *Environment and Land Use Act* as a park or protected area, or

(c) an area established or continued as an ecological reserve under the *Ecological Reserve Act* or by the *Protected Areas of British Columbia Act*;

"railway operation" means

(a) the operation and maintenance of the engines, locomotives and rolling stock of a railway, and

(b) the repair, construction, reconstruction and maintenance of the railway track and the railway right of way;

"resource management open fire" means an open fire that

(a) burns stubble or grass over an area that exceeds 5 ha,

(b) burns unpiled slash over an area of any size, or

(c) is not a category 1, 2, or 3 open fire and is lit, fuelled or used for silviculture treatment, forest health management, wildlife habitat enhancement, fire hazard abatement, ecological restoration or range improvement;

"sufficient fire fighting tools" means hand tools in a combination and type and of an appropriate number to properly equip all persons taking fire control action, including but not limited to shovels, axes, pulaskis, hand tank pumps, and fire extinguishers;

"utility transmission operation" means the operation, transmission, construction, establishment, maintenance and repair of electrical, oil, gas, radio, microwave, and telephone service;

"water delivery system" means a system that can

(a) deliver a sufficient volume of water to effectively fight a fire of a reasonably foreseeable size, taking all factors into consideration, including the conditions of any area where the water delivery system may need to be used, and

(b) deliver water to any place

(i) at the site of an industrial activity,

(ii) on the burn area or site of the high risk activity, or

(iii) reasonably adjacent to the burn area or the site of a high risk activity.

(2) In the Act:

"fire control" means an action to contain, extinguish or limit the spread of a fire;

"open fire" does not include a fire vented through a structure that has a flue and is incorporated in a building;

"site of an industrial activity" means the area on which, or within 500 m of which, a person is carrying out an industrial activity.

(3) Each of the following activities is included in the definition of "industrial activity" in section 1 of the Act:

(a) debris piling;

(b) mechanical modification of forest debris;

(c) railway operations;

(d) utility transmission operations;

(e) mining operations;

(f) silviculture treatments as defined under section 1 (1) of the Forest Planning and Practices Regulation B.C. Reg.14/2004;

(g) wood milling, processing and manufacturing;

(h) timber harvesting;

(i) road construction, maintenance and deactivation.

(4) A lawful recreational activity of a person is excluded from the definition of "industrial activity" if it takes place in a protected area.

Workers Compensation Act

2 A person is exempt from the requirements of the Act and this regulation as necessary to conform to the *Workers Compensation Act* and the regulations under that Act.

Application

3 (1) This regulation, other than sections 1 and 2, 14 and 15 and Part 6, does not apply inside the boundaries of the City of Vancouver or of a municipality.

(2) Part 5 and section 13 of this regulation do not apply inside the boundaries of a local government that

(a) is a local government under paragraphs (c) to (f) of the definition of "local government" in section 1 of the Act, and

(b) has a bylaw that relates to the lighting, fueling or use of open fires.

(3) Part 2 of this regulation does not apply inside the boundaries of a local government that

(a) is a local government under paragraphs (c) to (f) of the definition of "local government" in section 1 of the Act, and

(b) has a bylaw that relates to fire prevention and forest protection.

PART 2 - FIRE PREVENTION

Division 1 - Precautions

Requirement to provide contact details

4 Before April 1 of each year, a person who, under the *Forest Act*, is the holder of

(a) a major forest licence,

(b) a timber sale licence that is not a major licence,

(c) a community forest agreement, or

(d) a woodlot licence

must provide an official with a 24 hour a day contact telephone number if the person proposes to carry out an industrial activity between April 1 and October 31 of that year.

Sufficient fire-fighting tools for an industrial activity

5 At all times while there is a risk of a fire starting and spreading on an area that is forest land or grass land or is within 300 m of forest land or grass land, a person who carries out an industrial activity at a site in that area must ensure that sufficient fire fighting tools are available at that site.

High risk activities

6 (1) A person carrying out a high risk activity on or within 300 m of forest land or grass land must determine the Fire Danger Class for the location of the activity

(a) by using representative weather data for the area,

(b) by reference to

(i) the Danger Region from Schedule 1,

(ii) the applicable numerical rating under the Buildup Index, and

(iii) the applicable numerical rating under the Fire Weather Index, and

(c) by cross-referencing the Buildup Index with the Fire Weather Index, for their Danger Region, under Schedule 2.

(2) A person carrying out a high risk activity on or within 300 m of forest land or grass land must

(a) do so in accordance with the applicable restriction and duration set out in Schedule 3 for the Fire Danger Class, and,

(b) if there is a risk of a fire starting and spreading, keep at the activity site sufficient fire fighting tools and an adequate fire suppression system.

(3) A person who, in accordance with subsection (2) (a) and Schedule 3, is required to maintain a fire watcher, must ensure that the fire watcher

(a) can reasonably see the site of the high risk activity during the time the fire watcher is required,

(b) has sufficient fire fighting tools to carry out fire control,

(c) actively watches and patrols for sparks and fires on the site of the high risk activity,

(d) immediately carries out fire control and extinguishes the fire, if practicable, and

(e) has the means on site to report the fire.

Precautions to prevent escape of fire

7 A person

(a) carrying out an industrial activity that is refuse disposal, wood sorting, wood milling, wood processing or wood manufacturing, or

(b) operating a camp associated with that activity or any other industrial activity

on a site that is on or within 300 m of forest land or grass land must maintain a sufficient fuel break at or near the site to ensure that a fire originating at the site does not escape the site.

Engines

8 A person carrying out an industrial activity or high risk activity

(a) on forest land or grass land or within 300 m of forest land or grass land, and

(b) at a time when there is a risk of a fire starting and spreading,

must not operate an engine on that forest land or grass land, unless

(c) the necessary precautions are taken to ensure that the operation of the engine does not cause a fire,

(d) the engine is equipped with a safe and effective device for arresting sparks that is an integral part of the exhaust system and in good repair,

(e) the engine is equipped with an exhaust system and muffler that are within the manufacturer's specifications, and

(f) if the engine is over 7.5 kw (10 hp) and is stationary or semi-permanent, the engine is surrounded by a fuel break.

Railway operations

9 A person carrying out an industrial activity, that is a railway operation, on or within 300 m of forest land or grass land, must

(a) maintain locomotives and engines, equipment and rolling stock in a manner that does not produce an ignition source capable of starting a fire on or adjacent to the railway operation,

(b) maintain the railway right of way so that it is substantially free from dead or dry grass, weeds and other combustible materials,

(c) having regard to the Fire Danger Class, ensure that there are sufficient patrols of the railway right of way to provide for early and effective detection and suppression of fires on and adjacent to the right of way, and

(d) on or before April 1st of each year, provide to an official an annual schedule identifying the locations, dates and times of proposed rail grinding work.

Utility transmission operations

10 A person carrying out an industrial activity that is a utility transmission operation, on or within 300 m of forest land or grass land, must

(a) maintain utility transmission equipment, apparatus and materials in a manner that reduces the likelihood of producing an ignition source capable of starting a fire on or adjacent to the site of the utility transmission operation, and

(b) maintain the site in a manner that prevents any fire from spreading from the site.

Division 2 – Fire Hazard Assessment and Abatement

Hazard assessment

11 (1) For the purposes of section 7 of the Act,

(a) each of the following is a prescribed activity under subsections (1) and (2) of that section:

(i) operating a waste disposal site;

(ii) operating a dry land sort;

(iii) operating a camp associated with an industrial activity, and

(b) each of the following is a prescribed circumstance under subsection (1) of that section:

(i) a fire hazard exists;

(ii) a person is carrying out an industrial activity;

(iii) a person is operating

(A) a waste disposal site,

(B) a dry land sort, or

(C) a camp associated with timber harvesting or mining;

(iv) an official notifies a person referred to in subparagraph (ii) or (iii) that a fire hazard exists at the site of the activity or operation.

(2) The prescribed intervals, at which persons described in section 7 (1) of the Act must conduct fire hazard assessments, are

(a) 3 month intervals during the period in which the persons are carrying on the industrial activity or the prescribed activity in an area inside, or within 2 km of, the boundaries of

(i) a local government under paragraphs (d) to (f) of the definition of "local government" in section 1 of the Act, or

(ii) a fire protection district in a regional district, and

(b) the shorter interval between the most recent 3 month interval and the date on which the activity ceases for an expected period of 3 months or more.

(3) The prescribed intervals, at which persons described in section 7 (1) of the Act must conduct fire hazard assessments, are

(a) 6 month intervals during the period during which the persons, in any area other than the area described in subsection (2), are carrying on the industrial activity or the prescribed activity, and

(b) the shorter interval between the most recent 6 month interval and the date on which the activity ceases for an expected period of 6 months or more.

(4) A person required to conduct a fire hazard assessment under section 7 (1) of the Act must

(a) ensure that the fire hazard assessment includes an assessment of the fuel hazard and its associated risk of a fire starting or spreading, and

(b) provide a copy of the fire hazard assessment when requested to do so by an official.

Hazard abatement

12 (1) The following periods are prescribed as the periods in which persons described in section 7 (2) of the Act must abate fire hazards of which the persons are aware:

(a) for an area described in section 11 (3) of this regulation, each of the 6 month periods beginning on the dates on which the persons are required under section 7 (1) of the Act to conduct fire hazard assessments;

(b) for an area other than an area described in section 11 (3) of this regulation, each of the 12 month periods beginning on the dates on which the persons are required under section 7 (1) of the Act to conduct fire hazard assessments.

(2) A person required to abate a fire hazard under section 7 (2) of the Act must reduce the fuel hazard on the site of the industrial activity or prescribed activity as necessary to ensure that carrying out the activity

(a) does not increase the risk of a fire starting on the site, and

(b) if a fire were to start, would not increase the fire behaviour or fire suppression associated with the fire.

PART 3- FIRE CONTROL

Resources required for fire control activities

13 (1) A person who carries out fire control under section 6 (3) (a) of the Act must make the following available to fight the fire:

(a) if on Crown land, all of the person's

(i) employees, contractors or agents who are working within 30 km of the site of the industrial activity, and

(ii) heavy equipment located within 30 km of the site of the industrial activity;

(b) if on land other than Crown land,

(i) all of the person's employees, contractors or agents who are working on the land, and

(ii) all of the person's heavy equipment located on the land;

(c) sufficient fire fighting tools.

(2) A person carrying out an industrial activity is exempt from section 6 (3) of the Act in respect of a fire that starts at or within 1 km of the site of the industrial activity if the site is

(a) in a protected area, or

(b) private land that is not owned by the person or another who acts on the person's behalf or under the person's direction.

Rates of compensation

14 (1) The amount of the compensation that the government must pay under section 17 of the Act to a person described in that section is,

(a) for wages,

(i) at the rates as set out in Schedule 4 of this regulation, or

(ii) in the absence of rates as described in subparagraph (i), reasonable rates to be approved by the minister, and

(b) for use of equipment,

(i) at the rates, if any, for that type of equipment that are set out in the Equipment Rental Rate Guide authorized by the government, as amended or reissued from time to time, or

(ii) in the absence of rates as described in subparagraph (i), reasonable rates to be approved by the minister.

(2) If the government exercises its discretion under section 17 (2) of the Act to pay compensation to a person for the expenses described in that provision, the amount of the compensation is,

(a) for wages,

(i) at the rates as set out in Schedule 4 of this regulation, or

(ii) in the absence of rates as described in subparagraph (i), reasonable rates to be approved by the minister, and

(b) for use of equipment,

(i) at the rates for the same or similar equipment as set out in the Equipment Rental Rate Guide authorized by the government, as amended or reissued from time to time, or as agreed to in negotiated contracts, or published tariff rates, or

(ii) subject to subparagraph (i), the rates approved by the minister.

Compensation

15 (1) In sections 9 (4) and (5) of the Act, **"damage caused to the private land"** means damage that is caused to private land as established by proof of loss by the owner or the tenant but does not include damage associated with

(a) indirect or consequential damage to property,

(b) reforestation costs,

(c) lost opportunities,

(d) aesthetics, or

(e) foreseeable losses.

(2) For the purpose of section 9 (5) of the Act, the prescribed circumstances are that

(a) if the fire was on the private land, the damage was avoidable damage caused by fire control carried out by the government, or

(b) if the fire was not on the private land, the damage was caused by fire control carried out by the government.

Rehabilitation if a person carries out fire control

16 For the purposes of section 6 (3) (d) of the Act, on Crown land the prescribed requirements are that the person carrying out the industrial activity, as soon as practicable, must

(a) conduct a fire hazard assessment, ensuring that the fire hazard assessment includes an assessment of the fuel hazard and its associated risk of a fire starting or spreading,

(b) prepare and submit to an official for approval a site rehabilitation plan that specifies measures for

(i) minimizing any fuel hazard created as a result of fire control operations, and

(ii) maintaining natural drainage patterns for all of the fire control works to minimize surface soil erosion by

(A) stabilizing and re-vegetating soil disturbed or exposed by heavy equipment,

(B) stabilizing the stream channel and stream bed at stream crossings, and

(C) stabilizing sump and dam locations that were created for the purpose of carrying out fire control, and

(c) implement the measures specified in the approved site rehabilitation plan.

Rehabilitation if government carries out fire control

17 For the purposes of section 9 (6) of the Act, the prescribed requirements, applicable if the government exercises the discretion under that subsection to rehabilitate land, are that, as soon as practicable,

(a) a fuel hazard assessment must be carried out,

(b) a site rehabilitation plan must be prepared that specifies measures for

(i) minimizing any fuel hazard created as a result of fire control operations, and

(ii) maintaining natural drainage patterns for all of the fire control works to minimize surface soil erosion by

(A) stabilizing and re-vegetating soil disturbed or exposed by heavy equipment,

(B) stabilizing the stream channel and stream bed at stream crossings, and

(C) stabilizing sump and dam locations that were created for the purpose of carrying out fire control, and

(c) the measures specified in the site rehabilitation plan must be implemented.

PART 4- PERMISSIBLE OPEN FIRES

Right of government to use fire

18 This Part does not apply to or in respect of a fire to which section 18 of the Act applies.

Open fires in outdoor stoves

19 (1) The circumstances in which a person described in section 5 (1) or 6 (1) of the Act may light, fuel or use an open fire that is in an outdoor stove, and is in or within 1 km of forest land or grass land, are as follows:

(a) the person is not prohibited from doing so under another enactment;

(b) to do so is safe and is likely to continue to be safe;

(c) the person takes reasonable precautions to ensure the fire is contained in the stove;

(d) before leaving the area, the person ensures that the fire is extinguished.

(2) Without limiting subsection (1), a person who lights, fuels or uses an open fire referred to in that subsection must ensure that the fire does not escape.

(3) If an open fire referred to in subsection (1) becomes out of control, the person who lit, fueled or used the open fire

(a) immediately must carry out fire control and extinguish the open fire if practicable, and

(b) as soon as practicable must report the open fire as described in section 2 of the Act.

(4) A person to whom subsection (3) applies may discontinue carrying out fire control if relieved from doing so by an official.

Category 1 open fire

20 (1) The circumstances in which a person described in section 5 (1) or 6 (1) of the Act may light, fuel or use a category 1 open fire in or within 1 km of forest land or grass land are as follows:

(a) the person is not prohibited from doing so under another enactment;

(b) to do so is safe and is likely to continue to be safe;

(c) the person takes reasonable precautions to ensure the fire is contained in the burn area;

(d) while the fire is burning the person ensures that the fire is watched and patrolled by a person to prevent the escape of fire and the person is equipped with sufficient fire fighting tools;

(e) before leaving the area, the person ensures that the fire is extinguished.

(2) Without limiting subsection (1), a person who lights, fuels or uses a category 1 open fire must ensure that the fire does not escape.

(3) If a category 1 open fire spreads beyond the burn area or otherwise becomes out of control, the person who lit, fueled or used the open fire

(a) immediately must carry out fire control and extinguish the fire if practicable, and

(b) as soon as practicable must report the open fire as described in section 2 of the Act.

(4) A person to whom subsection (3) applies may discontinue carrying out fire control if relieved from doing so by an official.

Category 2 open fire

21 (1) The circumstances in which a person described in section 5 (1) or 6 (1) of the Act may light, fuel or use a category 2 open fire in or within 1 km of forest land or grass land are as follows:

(a) the person is not prohibited from doing so under another enactment;

(b) to do so is safe and is likely to continue to be safe;

(c) the person establishes a fuel break around the burn area;

(d) while the fire is burning and there is a risk of the fire escaping the person ensures that

(i) the fuel break is maintained,

(ii) a fire suppression system is available at the burn area, of a type and with a capacity adequate for fire control if the fire escapes,

(iii) the fire is watched and patrolled by a person to prevent the escape of fire and the person is equipped with sufficient fire fighting tools, and

(iv) the fire does not exceed the capacity of the persons, fire fighting tools and heavy equipment on site to take timely action to prevent any fire from escaping;

(e) before leaving the burn area, the person ensures that the fire is extinguished.

(2) Without limiting subsection (1), a person who lights, fuels or uses a category 2 open fire must ensure that the fire does not escape.

(3) If a category 2 fire spreads beyond the burn area or otherwise becomes out of control, the person who lit, fueled or used the open fire

(a) immediately must carry out fire control and extinguish the fire if practicable, and

(b) as soon as practicable, must report the open fire as described in section 2 of the Act.

(4) A person to whom subsection (3) applies may discontinue carrying out fire control if relieved from doing so by an official.

Category 3 open fire

22 (1) The circumstances in which a person described in section 5 (1) or 6 (1) of the Act may light, fuel or use a category 3 open fire in or within 1 km of forest land or grass land are as follows:

(a) the person is not prohibited from doing so under another enactment;

(b) to do so is safe and is likely to continue to be safe;

(c) the person obtains a burn registration number for the fire

(i) by

(A) calling the telephone number made known by the government for that purpose, or

(B) contacting an official by other means, and

(ii) by providing the information referred to in section 24 of this regulation;

(d) the person takes all necessary precautions to ensure the fire is contained in the burn area;

(e) the person establishes a fuel break around

(i) the burn area, or

(ii) each debris pile or windrow;

(f) while the fire is burning and there is a risk of the fire escaping the person ensures that

(i) the fuel break is maintained,

(ii) a fire suppression system is available at the burn area, of a type and with a capacity adequate for fire control if the fire escapes, and

(iii) the fire is watched and patrolled by a person to prevent the escape of fire and the person is equipped with sufficient fire fighting tools.

(2) A person who lights, fuels or uses a category 3 open fire on a burn area must ensure that

(a) no windrow on the burn area exceeds 200 m in length or 15 m in width, and

(b) the category 3 open fire is extinguished by the date specified by the official or person who issued the burn registration number.

(3) Without limiting subsection (1) or (2), a person who lights, fuels or uses a category 3 open fire must ensure that the fire does not escape.

(4) If a category 3 open fire spreads beyond the burn area or otherwise becomes out of control, the person who lit, fueled or used the open fire

(a) immediately must carry out fire control and extinguish the fire if practicable, and

(b) as soon as practicable must report the open fire as described in section 2 of the Act.

(5) A person to whom subsection (4) applies may discontinue carrying out fire control if relieved from doing so by an official.

Resource management open fire

23 (1) The circumstances in which a person described in section 5 (1) or 6 (1) of the Act may light, fuel or use a resource management open fire in or within 1 km of forest land or grass land are as follows:

(a) the person is not prohibited from doing so under another enactment;

(b) to do so is safe and is likely to continue to be safe;

(c) the person submits a burn plan to an official and receives the official's approval to it in writing;

(d) the person obtains a burn registration number for the fire

(i) by

(A) calling the telephone number made known by the government for that purpose, or

(B) contacting an official by other means, and

(ii) by providing the information referred to in section 24;

(e) the person takes all necessary precautions to ensure the fire is contained in the burn area.

(2) A person who lights, fuels or uses a resource management open fire on a burn area must ensure that the fire is extinguished by the date specified by the official or person who issued the burn registration number.

(3) Without limiting subsection (1) or (2), a person who lights, fuels or uses a resource management open fire must

(a) do so in accordance with the applicable approved burn plan, and

(b) ensure that the fire does not escape.

(4) If a resource management open fire spreads beyond the burn area or otherwise becomes out of control, the person who lit, fueled or used the fire

(a) immediately must carry out fire control and extinguish the fire if practicable, and

(b) as soon as practicable must report the fire as described in section 2 of the Act.

(5) A person to whom subsection (4) applies may discontinue carrying out fire control if relieved from doing so by an official.

Burn registration number

24 (1) The following is the information to be provided under section 22 (1) (c) (ii) and 23 (1) (d) (ii):

(a) the name, address, and telephone or facsimile number, or other means of immediate contact, of the person who proposes to light, fuel or use the open fire;

(b) the whereabouts of, and a legal description of, the parcel of land that contains the proposed burn area;

(c) the category of the proposed open fire;

(d) other information relating to the proposed open fire that the official or the person answering the telephone number requires.

(2) A person answering the burn registration telephone number or an official who receives an application from a person in accordance with subsection (1) may

(a) assign a burn registration number to the person unless the proposed open fire has been prohibited or restricted under section 10 of the Act, and

(b) specify a date on or before which the open fire must be extinguished.

(3) A person who has been assigned a burn registration number must provide it to an official immediately on request.

PART 5 - EXEMPTIONS

Exemptions from certain regulations

25 (1) An official may exercise the discretion granted under section 72 (3) of the Act to exempt a person, subject to conditions or alternative requirements the official may specify, from all or part of

(a) Parts 2 and 4 of this regulation, or

(b) section 13 of this regulation

only if satisfied that the exemption is necessary because the provision that will be the subject of the exemption is not practicable, given the circumstances or conditions applicable to a particular area.

(2) A person exempted under this section by an exemption made subject to conditions must comply with the conditions.

Exemptions from certain provisions of the Act

26 (1) An official is authorized to exempt a person from sections 5, 6 or 7 of the Act if satisfied that the exemption is necessary because the provision that will be the subject of the exemption is not practicable, given the circumstances or conditions applicable to a particular area.

(2) In making an exemption under this section the official may make the exemption subject to conditions.

(3) A person exempted under this section by an exemption made subject to conditions must comply with the conditions.

Process respecting exemptions

27 An exemption referred to in section 25 or 26 must

(a) be in writing,

(b) specify the matter to which it relates,

(c) specify when the exemption comes into effect, and

(d) be delivered to the person to whom the exemption applies.

PART 6- COST RECOVERY AND REMEDIES

Division 1 - Determinations

Definitions

28 In section 29:

"cost sharing agreement" means an agreement between the government and a person in which

(a) the person agrees to pay to the government an amount of money, and

(b) the government agrees to either reduce or eliminate the costs it incurs in carrying out fire control in respect of a fire that is the responsibility of the person;

"service agreement" means an agreement between the government and a person in which

(a) the person agrees to pay to the government an amount of money, and

(b) subject to section 8 of the Act, the government agrees to

(i) carry out fire control services in respect of a fire that is the responsibility of the person, and

(ii) either reduce or not recover the government's costs determined under section 25 (1) (a) or 27 (1) (b) of the Act incurred in carrying out fire control for a fire that is the responsibility of the person.

Circumstances for not seeking cost recovery

29 The circumstances in which the minister, under section 25 (2) or 27 (1) (b) of the Act may not by order require a person to pay to the government the government's fire control costs determined under section 25 (1) (a) or 27 (1) (b) of the Act are

(a) before the government has carried out fire control for the fire that gives rise to the government's costs,

(i) the person has entered into a cost sharing agreement or a service agreement with the government, and

(ii) the agreement is in effect at the time of the fire, or

(b) the fire that gives rise to the government's costs results from timber harvesting carried out by a person who

(i) is the holder of an agreement or licence under the *Forest Act*, and

(ii) as of the date of the fire the annual rent payable for the agreement or licence by the person under the Annual Rent Regulation, B.C. Reg. 122/2003, is not in arrears.

Determination of damages

30 For the purposes of section 25 (1) (b) and 27 (1) (c) of the Act, the manner in which the dollar value of

(a) Crown timber, if it is mature timber, is to be calculated is by ascertaining the amount of stumpage applicable to that timber under the *Forest Act* and assigning that amount as the dollar value for that timber,

(b) Crown timber, if it is not mature timber, is to be calculated by determining

(i) whether timber when damaged or destroyed was in

(A) the Coast forest region or the Kalum forest district, or

(B) elsewhere in British Columbia,

(ii) the average age of the timber when damaged or destroyed,

(iii) the area over which the damage and destruction occurred,

(iv) the extent of the damage and destruction, and

(v) either of

(A) the species composition of the stand of the timber when the fire occurred, or

(B) the biogeoclimatic zone, subzone and variant of the area over which the damage and destruction occurred

and assigning the amount that the minister considers reasonable as the dollar value of the timber after taking into account the matters set out in subparagraphs (i) to (v).

(c) other forest land resources is to be calculated is by multiplying the number of hectares of other forest land resources damaged or destroyed,

(i) if in a protected area or an area that is the subject of an order under sections 7, 8, 10, 12, 14 or 15 of the Government Actions Regulation, by $5 000, or

(ii) if in any other area, by $1 000

and then assigning the product obtained as the dollar value for those other forest land resources,

(d) grass land resources is to be calculated is by multiplying by $500 the number of hectares of grass land damaged or destroyed and then assigning the product obtained as the dollar value for those grass land resources, and

(e) other property is to be calculated is by ascertaining the amount of the replacement value of that property and then assigning that amount as the dollar value for that property.

Determination of government fire control costs

31 (1) For the purposes of section 25 (1) (a) and 27 (1) (b) of the Act, the manner in which the amount of the government's fire control costs in respect of a particular fire is to be calculated is

(a) by ascertaining the sum of the following costs, expenditures and charges that are attributable to the fire:

(i) hourly wages and overtime wages of responding employees, including payroll loading costs;

(ii) distance charges for use of government and private vehicles;

(iii) food, transportation and accommodation expenditures;

(iv) costs for expendable supplies and materials consumed;

(v) air tanker fuel costs and flight costs;

(vi) helicopter fuel costs and flight costs;

(vii) aircraft basing charges (preparedness) for contracted aircraft;

(viii) retardant and other suppressant costs;

(ix) rent on use of equipment;

(x) replacement, repair or cleaning of damaged or used vehicles or equipment, directly resulting from the fire control;

(xi) private goods and services contracted, hired, rented or purchased;

(xii) investigation, research and analysis services related to

(A) post-incident evaluation,

(B) contingency plan reviews, and

(C) other incident follow-up activities;

(xiii) consulting and other professional charges;

(xiv) rehabilitation and/or slope stabilization costs, and

(b) by adding to the sum ascertained under paragraph (a) for overhead an amount equal to the greater of

(i) $200, and

(ii) 20% of the amount determined under paragraph (a)

to arrive at the total dollar amount of the government's fire control costs for the fire.

(2) The rates to be charged for the purposes of subsection (1) (a) are

(a) for wages,

(i) the rates, if any, that

(A) are applicable and in effect in the part of British Columbia in which the particular fire occurs, and

(B) have been established as terms and conditions of employment by collective agreement or by another method, or

(ii) in the absence of rates as described in subparagraph (i), the rates set out in Schedule 4, and

(b) for use of equipment

(i) the rates, if any, for that type of equipment that are set out in the Equipment Rental Rate Guide authorized by the government, as amended or reissued from time to time, or

(ii) in the absence of rates as described in subparagraph (i), reasonable rates to be approved by the minister.

Prescribed categories of leases

32 Leases from the government under the *Land Act* of Crown land for purposes other than for grazing, aquaculture, float homes or private moorage are the prescribed categories of leases for the purposes of section 25 (2) (a) of the Act.

Division 2 - Administrative Penalties and Offences

Administrative penalties

33 (1) The maximum amount of an administrative penalty that may be levied under section 27 (1) (a) of the Act is

(a) is $100 000 for the contravention of any of the following provisions of this regulation: 6 (1), (2) or (3); 9; 10; 12 (2); 13 (1); 19 (2) or (3); 20 (2) or (3); 21 (2) or (3); 22 (3) or (4); 23 (3) or (4); 25 (2); 26 (3), and

(b) $10 000 for the contravention of any of the following provisions of this regulation: section 4; 5; 7; 8; 11 (4); 16; 22 (2); 23 (2).

(2) The maximum amount of an administrative penalty that may be levied under section 27 (1) (a) of the Act is

(a) $100 000 for the contravention of any of the following provisions of the Act: section 6 (1), (2) (a) or (b) or (3); 7 (2) or (4); 22 (1); 56, and

(b) $10 000 for the contravention of any of the following provisions of the Act: section 2; 3 (1) or (2) (a) or (b); 5 (1) or (2) (a) or (b); 7 (2); 10 (3) or (4); 11 (2); 12 (2) (a) or (b); 13 (2) or 16 (2).

Offences

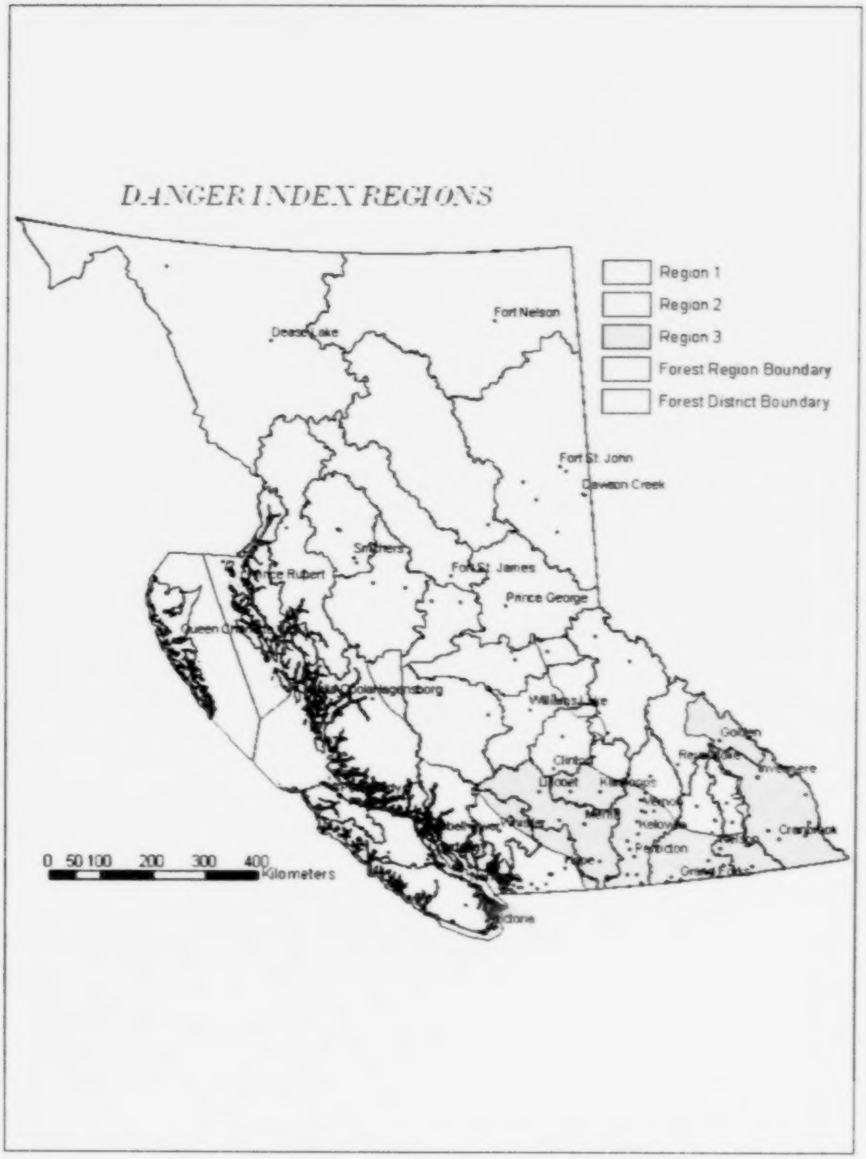
34 (1) A person who contravenes section 6 (1), (2) or (3), 9, 10, 12 (2), 13 (1), 19 (2) or (3), 20 (2) or (3), 21 (2) or (3), 22 (3) or (4), 23 (3) or (4), 25 (2) or 26 (3) commits an offence and is liable on conviction to a fine not exceeding $100 000 or to imprisonment for not more than 6 months or to both.

(2) A person who contravenes section 4, 5, 7, 8, 11 (4), 16, 22 (2), 23 (2) or 24 (3), commits an offence and is liable on conviction to a fine not exceeding $10 000.

SCHEDULE 1

DANGER REGIONS

(Section 6)


DANGER INDEX REGIONS
Region 1
Region 2
Region 3
Forest Region Boundary
Forest District Boundary
Fort Nelson
Dease Lake
Fort St. John
Dawson Creek
Smithers
Prince Rupert
Fort St. James
Prince George
Williams Lake
Golden
Invermere
Clinton
Lillooet
Kamloops
Vernon
Kelowna
Merritt
Penticton
Cranbrook
Nelson
Hope
Victoria
0 50 100 200 300 400
Kilometers

SCHEDULE 2

FIRE DANGER CLASS

(Section 6)

Danger Region 1

Buildup Index	**Fire Weather Index**				
	0	**1 - 7**	**8 - 16**	**17 - 30**	**31 +**
0 – 19	I	II	II	III	III
20 – 42	II	II	III	III	IV
43 – 69	II	III	III	IV	IV
70 – 118	II	III	IV	IV	V
119 +	III	III	IV	V	V

Danger Region 2

Buildup Index	**Fire Weather Index**				
	0- 4	**5 - 16**	**17 - 26**	**27 - 37**	**38 +**
0 – 48	I	II	II	III	III
49 –85	II	II	III	III	IV
86 – 118	II	III	III	IV	IV
119 – 158	II	III	IV	IV	V
159 +	III	III	IV	V	V

Danger Region 3

Buildup Index	**Fire Weather Index**				
	0 - 4	**5 - 16**	**17 - 27**	**28 - 46**	**47 +**
0 – 50	I	II	II	III	III
51 – 90	II	II	III	III	IV
91 – 140	II	III	III	IV	V
141 – 200	II	III	IV	IV	V
210 +	III	III	IV	IV	V

SCHEDULE 3

RESTRICTIONS ON HIGH RISK ACTIVITIES

(Section 6 (3))

Column 1 Fire Danger Class (DGR)	**Column 2 Restriction**	**Column 3 Duration**
III (moderate)	After 3 consecutive days of DGR III or greater, maintain a fire watcher after work for a minimum of 2 hours	Until after the fire danger class falls below DGR III for 2 or more consecutive days
IV (high)	Maintain a fire watcher after work for a minimum of 2 hours	Until after the fire danger class falls below DGR III for 2 or more consecutive days
	After 3 consecutive days of DGR IV, cease activity between 1 p.m. PDT (Pacific Daylight Saving Time) and sunset each day	Until after the fire danger class falls to DGR III for 2 consecutive days, or falls below DGR III
V (extreme)	Cease activity between 1 p.m. PDT (Pacific Daylight Saving Time) and sunset each day and maintain a fire watcher after work for a minimum of 2 hours	Until after the fire danger class falls below DGR IV for 2 or more consecutive days
	After 3 consecutive days of DGR V, cease activity all day	Until after the danger class falls below DGR V for 3 or more consecutive days, or falls below DGR IV

SCHEDULE 4

RATES OF COMPENSATION

(Sections 14 and 31)

CATEGORY	TYPE OF ASSISTANCE	RATE
1	Emergency assistance – non fire line positions (warehouse, clerical, administration, heli-base, camp, and kitchen staff).	$13/hr
2	Emergency Fire Fighter including Pump Operator, Cook, Equipment Swamper, Falling Spotter, Security Person, Radio Operator, and Class 5 Driver.	$15/hr
3	Crew Leader, Power Saw Operator (bucker), Time Recorder, Fire Patrol Person, Planning, Logistics, or Finance Assistant with computer skills, and Resource Tracking System Dispatcher.	$17/hr
4	Fire Warden, Field and Weather Observer, Unit Leader, Level 3 First Aid Attendant, Head Cook, Air Assistant, Infra-red Equipment Operator, and Class 1,2,3, or 4 Driver.	$19/hr
5	Incident Commander Type 4, Task Force Leader, Heli-base Manager, Warehouse Manager, Security Manager, Strike Team Leader, Line Scout (locator), Heavy Equipment Operator, and Technical Specialists (mapping, computer systems, fire behavior, training, etc.).	$20/hr
6	Division Supervisor, Group Supervisor, Staging Area Manager, Camp Manager, Helicopter Coordinator (Rotary Wing Air Attack Officer), Safety Assistant, Liaison Assistant, and Information Assistant.	$21/hr
7	Incident Commander Type 3, Section Chief Type 2, Branch Director, Danger Tree Assessor, Safety Officer, Liaison Officer, Information Officer, Agency Representative, Risk Management Officer, and Rehabilitation Coordinator.	$22/hr
8	Incident Commander Type 2 (and Deputy), Section Chief Type 1 (and Deputy), Trade person with tools, and Danger Tree Assessment Coordinator.	$23/hr
9	Danger Tree Faller with personal protective equipment	$32/hr
10	Deputy Incident Commander Type 1, Coach/Mentor Type 1, and Faller Coordinator.	$35/hr